



BC

LABORATORIES, INC.

Work Order Number: 1720267

Laboratory Documentation Requirements

For Data Validation of

GC Analysis

Volatiles Analysis

Wet Chemistry Analysis

Prepared By

BC Laboratories

For AMEC Environmental & Infrastructure-

5023146096

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Table of Contents

Sample Information

Case Narrative.....	8
Chain of Custody and Cooler Receipt form.....	11

GC Analysis

RSK-175M

Analysis Data Package Cover Page.....	16
Method Detection and Reporting Limits.....	18
Organic Analysis Data Sheet.....	19
Preparation Batch Summary - B[H0355].....	24
Method Blank Data Sheet - B[H0355].....	25
LCS Recoveries - B[H0355].....	26
Analysis Batch (Sequence) Summary - 1701454.....	27
Analysis Batch (Sequence) Summary - 1713774.....	28
Continuing Calibration Check - 1701454.....	29
Continuing Calibration Check - 1713774.....	30
Initial Calibration Standards - 1702007.....	36
Initial Calibration Data - 1702007.....	37
Holding Time Summary.....	39

Raw Data From Instrument GC-V1

Raw Data - Samples

1720267-04 (04AUG15.D).....	42
1720267-08 (04AUG16.D).....	45
1720267-09 (04AUG17.D).....	47
1720267-10 (04AUG18.D).....	49
1720267-11 (04AUG19.D).....	53

Raw Data - Calibration Standards

1701454-CAL1 (27JAN05.D).....	57
1701454-CAL2 (27JAN04.D).....	62
1701454-CAL3 (27JAN03.D).....	67
1701454-CAL4 (27JAN02.D).....	72

Raw Data - ICV

1701454-ICV1 (27JAN06.D).....	77
-------------------------------	----

Raw Data - ICB

1701454-ICB1 (27JAN07.D).....	83
-------------------------------	----

Raw Data - CCV

1713774-CCV1 (04AUG02.D).....	86
1713774-CCV2 (04AUG10.D).....	93
1713774-CCV3 (04AUG22.D).....	101
1713774-CCV4 (04AUG34.D).....	109
1713774-CCV5 (04AUG40.D).....	117

Raw Data - CCB

1713774-CCB1 (04AUG03.D).....	126
1713774-CCB2 (04AUG11.D).....	128
1713774-CCB3 (04AUG23.D).....	130
1713774-CCB4 (04AUG35.D).....	132
1713774-CCB5 (04AUG41.D).....	134

Raw Data - Method Blank

B[H0355-BLK1 (04AUG04.D).....	137
-------------------------------	-----

Raw Data - Lab Control Sample

B[H0355-BS1 (04AUG05.D).....	140
------------------------------	-----

Raw Data - Lab Control Sample Duplicate

B[H0355-BSD1 (04AUG06.D).....	148
-------------------------------	-----

Raw Data - Batch Information

B[H0355 - Batch.....	156
----------------------	-----

Raw Data - Sequence Information

1701454 - Sequence.....	158
-------------------------	-----



Table of Contents

1713774 - Sequence.....	159
Volatiles Analysis	
EPA-8260B	
Analysis Data Package Cover Page.....	161
Method Detection and Reporting Limits.....	163
Organic Analysis Data Sheet.....	166
Preparation Batch Summary - B[G2380.....	209
Method Blank Data Sheet - B[G2380.....	210
MS/MSD Recoveries - B[G2380.....	214
LCS Recoveries - B[G2380.....	220
Analysis Batch (Sequence) Summary - 1712752.....	224
Analysis Batch (Sequence) Summary - 1713324.....	225
Mass Spec Instrument Performance check - 1712752.....	227
Mass Spec Instrument Performance check - 1713324.....	229
Continuing Calibration Check - 1713324.....	232
Surrogate Standard Recovery and RT Summary - 1712752.....	248
Surrogate Standard Recovery and RT Summary - 1713324.....	249
Internal Standard Area And RT Summary - 1712752.....	253
Internal Standard Area And RT Summary - 1713324.....	256
Initial Calibration Standards - 1707017.....	261
Initial Calibration Data - 1707017.....	262
Holding Time Summary.....	298
Raw Data From Instrument MS-V5	
Raw Data - Samples	
1720267-01 (28JUL51.D).....	301
1720267-02 (28JUL52.D).....	322
1720267-03 (28JUL53.D).....	341
1720267-04 (28JUL54.D).....	358
1720267-05 (28JUL55.D).....	368
1720267-06 (28JUL56.D).....	378
1720267-07 (28JUL57.D).....	387
1720267-08 (28JUL58.D).....	403
1720267-09 (28JUL59.D).....	412
1720267-10 (28JUL67.D).....	420
1720267-11 (28JUL60.D).....	429
1720267-12 (28JUL68.D).....	439
1720267-13 (28JUL69.D).....	451
1720267-14 (28JUL70.D).....	455
1720267-15 (28JUL71.D).....	459
Raw Data - Calibration Standards	
1712752-CAL1 (20JUL03.D).....	464
1712752-CAL2 (20JUL05.D).....	467
1712752-CAL3 (20JUL06.D).....	472
1712752-CAL4 (20JUL07.D).....	475
1712752-CAL5 (20JUL08.D).....	478
1712752-CAL6 (20JUL09.D).....	481
1712752-CAL7 (20JUL15.D).....	486
1712752-CAL8 (20JUL17.D).....	488
1712752-CAL9 (20JUL18.D).....	490
1712752-CALA (20JUL19.D).....	492
1712752-CALB (20JUL20.D).....	494
1712752-CALC (20JUL21.D).....	496
1712752-CALD (17JUL50.D).....	498
1712752-CALE (17JUL51.D).....	500
1712752-CALF (17JUL52.D).....	502
1712752-CALG (17JUL53.D).....	504



Table of Contents

1712752-CALH (17JUL54.D).....	506
1712752-CALI (17JUL55.D).....	508
1707017 Calibration Analytes.....	510
Raw Data - ICV	
1713324-ICV1 (20JUL12.D).....	513
1713324-ICV2 (20JUL24.D).....	516
Raw Data - ICB	
1713324-ICB1 (20JUL14.D).....	519
1713324-ICB2 (20JUL26.D).....	521
Raw Data - CCV	
1713324-CCV3 (28JUL33.D).....	524
1713324-CCV4 (28JUL34.D).....	527
1713324-CCV5 (28JUL63.D).....	529
1713324-CCV6 (28JUL64.D).....	532
1713324-CCV7 (29JUL13.D).....	534
1713324-CCV8 (29JUL14.D).....	537
Raw Data - CCB	
1713324-CCB2 (28JUL35.D).....	540
1713324-CCB3 (28JUL65.D).....	544
1713324-CCB4 (29JUL15.D).....	548
Raw Data - Tune	
1712752-TUN1 (20JUL02.D).....	553
1712752-TUN2 (17JUL49.D).....	555
1713324-TUN2 (28JUL32.D).....	557
1713324-TUN3 (28JUL62.D).....	559
1713324-TUN4 (29JUL12.D).....	561
Raw Data - Method Blank	
B[G2380-BLK1 (28JUL66.D).....	564
Raw Data - Matrix Spike	
B[G2380-MS1 (28JUL73.D).....	569
Raw Data - Matrix Spike Duplicate	
B[G2380-MSD1 (28JUL74.D).....	575
Raw Data - Lab Control Sample	
B[G2380-BS1 (28JUL72.D).....	581
Raw Data - Batch Information	
B[G2380 - Batch.....	587
Raw Data - Sequence Information	
1712752 - Sequence.....	590
1713324 - Sequence.....	591
Wet Chemistry Analysis	
EPA-160.1	
Analysis Data Package Cover Page.....	594
Method Detection and Reporting Limits.....	596
Inorganic Analysis Data Sheet.....	597
Preparation Batch Summary - B[G2377.....	600
Method Blank Data Sheet - B[G2377.....	601
Duplicates - B[G2377.....	602
LCS Recoveries - B[G2377.....	603
Analysis Batch (Sequence) Summary - 1713585.....	604
Holding Time Summary.....	605
Raw Data From Instrument MANUAL	
Raw Data - Batch Information	
B[G2377 - Batch.....	608
Raw Data - Sequence Information	
1713585 - Sequence.....	610
1713585 - Sequence Raw Data.....	611



Table of Contents

EPA-300.0

Analysis Data Package Cover Page.....	613
Method Detection and Reporting Limits.....	615
Inorganic Analysis Data Sheet.....	616
Preparation Batch Summary - B[G2045].....	627
Method Blank Data Sheet - B[G2045].....	628
Duplicates - B[G2045].....	629
MS/MSD Recoveries - B[G2045].....	630
LCS Recoveries - B[G2045].....	631
Analysis Batch (Sequence) Summary - 1713206.....	632
Blanks - 1713206.....	633
Initial And Continuing Calibration Checks - 1713206.....	634
Holding Time Summary.....	635
Raw Data From Instrument IC5	
Raw Data - Samples	
1720267-01 (E072517.seq-08).....	639
1720267-01RE1 (E072517.seq-22).....	641
1720267-02 (E072517.seq-12).....	645
1720267-02RE1 (E072517.seq-26).....	647
1720267-03 (E072517.seq-13).....	651
1720267-03RE1 (E072517.seq-27).....	653
1720267-04 (E072517.seq-14).....	657
1720267-08 (E072517.seq-15).....	661
1720267-09 (E072517.seq-18).....	663
1720267-10 (E072517.seq-19).....	665
1720267-11 (E072517.seq-20).....	667
Raw Data - Calibration Standards	
IC5 ANION - 2017-07-24 - standard 0 (2017-07-24_0824).....	672
IC5 ANION - 2017-07-24 - standard 1 (2017-07-24_0842).....	674
IC5 ANION - 2017-07-24 - standard 2 (2017-07-24_0859).....	678
IC5 ANION - 2017-07-24 - standard 3 (2017-07-24_0917).....	682
IC5 ANION - 2017-07-24 - standard 4 (2017-07-24_0935).....	686
IC5 ANION - 2017-07-24 - standard 5 (2017-07-24_0953).....	690
IC5 ANION - 2017-07-24 - standard 6 (2017-07-24_1011).....	694
IC5 ANION - 2017-07-24 - standard 6 (2017-07-24_1011S).....	698
IC5 ANION - 2017-07-24 - standard 6 (2017-07-24_1011MS).....	701
Raw Data - ICV	
1713206-ICV1 (E072517.seq-04).....	705
Raw Data - ICB	
1713206-ICB1 (E072517.seq-05).....	708
Raw Data - CCV	
1713206-CCV1 (E072517.seq-16).....	710
1713206-CCV2 (E072517.seq-28).....	712
1713206-CCV3 (E072517.seq-33).....	714
Raw Data - CCB	
1713206-CCB1 (E072517.seq-17).....	717
1713206-CCB2 (E072517.seq-29).....	719
1713206-CCB3 (E072517.seq-34).....	720
Raw Data - Method Blank	
B[G2045-BLK1 (E072517.seq-06).....	723
Raw Data - Duplicate	
B[G2045-DUP1 (E072517.seq-23).....	725
Raw Data - Matrix Spike	
B[G2045-MS1 (E072517.seq-24).....	730
Raw Data - Matrix Spike Duplicate	
B[G2045-MSD1 (E072517.seq-25).....	733



Table of Contents

Raw Data - Lab Control Sample	
B[G2045-BS1 (E072517.seq-07).....	736
Raw Data - Batch Information	
B[G2045 - Batch.....	739
Raw Data - Sequence Information	
1713206 - Sequence.....	743
EPA-310.1	
Analysis Data Package Cover Page.....	745
Method Detection and Reporting Limits.....	747
Inorganic Analysis Data Sheet.....	748
Preparation Batch Summary - B[G2107.....	756
Preparation Batch Summary - B[G2114.....	757
Method Blank Data Sheet - B[G2107.....	758
Method Blank Data Sheet - B[G2114.....	759
Duplicates - B[G2107.....	760
Duplicates - B[G2114.....	761
LCS Recoveries - B[G2107.....	762
LCS Recoveries - B[G2114.....	763
Analysis Batch (Sequence) Summary - 1713352.....	764
Holding Time Summary.....	765
Raw Data From Instrument MET-1	
Raw Data - Analytical Runs	
Tiamo072717 (2017-07-27).....	768
Raw Data - Batch Information	
B[G2107 - Batch.....	791
B[G2114 - Batch.....	793
Raw Data - Sequence Information	
1713352 - Sequence.....	795
EPA-353.2	
Analysis Data Package Cover Page.....	803
Method Detection and Reporting Limits.....	805
Inorganic Analysis Data Sheet.....	806
Preparation Batch Summary - B[G2225.....	814
Method Blank Data Sheet - B[G2225.....	815
Duplicates - B[G2225.....	816
MS/MSD Recoveries - B[G2225.....	817
LCS Recoveries - B[G2225.....	818
Analysis Batch (Sequence) Summary - 1713243.....	819
Blanks - 1713243.....	821
Initial And Continuing Calibration Checks - 1713243.....	822
Holding Time Summary.....	823
Raw Data From Instrument KONE-1	
Raw Data - Analytical Runs	
170725 0945 NO ₂ (2017-07-25).....	826
Raw Data - Calibration Summary	
2017-07-24_1059 (2017-07-24).....	831
Raw Data - Batch Information	
B[G2225 - Batch.....	835
Raw Data - Sequence Information	
1713243 - Sequence.....	837
EPA-415.1	
Analysis Data Package Cover Page.....	839
Method Detection and Reporting Limits.....	841
Inorganic Analysis Data Sheet.....	842
Preparation Batch Summary - B[G2146.....	847
Method Blank Data Sheet - B[G2146.....	848



Table of Contents

Duplicates - B[G2146].....	849
MS/MSD Recoveries - B[G2146].....	850
LCS Recoveries - B[G2146].....	851
Analysis Batch (Sequence) Summary - 1713540.....	852
Blanks - 1713540.....	854
Initial And Continuing Calibration Checks - 1713540.....	855
Holding Time Summary.....	856
Raw Data From Instrument TOC2	
Raw Data - Analytical Runs	
20170728_0800 (2017-07-28).....	859
20170731_0905 (2017-07-31).....	869
Raw Data - Calibration Summary	
20170629 (2017-06-29).....	876
Raw Data - Batch Information	
B[G2146] - Batch.....	883
Raw Data - Sequence Information	
1713540 - Sequence.....	885
SM-4500SD	
Analysis Data Package Cover Page.....	887
Method Detection and Reporting Limits.....	889
Inorganic Analysis Data Sheet.....	890
Preparation Batch Summary - B[G2469].....	898
Preparation Batch Summary - B[G2470].....	899
Method Blank Data Sheet - B[G2469].....	900
Method Blank Data Sheet - B[G2470].....	901
Duplicates - B[G2469].....	902
Duplicates - B[G2470].....	903
MS/MSD Recoveries - B[G2469].....	904
MS/MSD Recoveries - B[G2470].....	905
LCS Recoveries - B[G2469].....	906
LCS Recoveries - B[G2470].....	907
Analysis Batch (Sequence) Summary - 1713618.....	908
Blanks - 1713618.....	909
Initial And Continuing Calibration Checks - 1713618.....	910
Holding Time Summary.....	911
Raw Data From Instrument SPEC06	
Raw Data - Batch Information	
B[G2469] - Batch.....	914
B[G2470] - Batch.....	915
Raw Data - Sequence Information	
1713618 - Sequence.....	917
1713618 - Sequence Raw Data.....	919
Notes and Definitions	925



Case Narrative

Analyses Requested: RSK 175M

Submission Number: 17-20267

Instrument ID: GC-V1

Model: Varian 3400

Column Type: RTX 502.2, 60m x 0.25mm ID, 1.4 μ m film thickness.

Samples were received refrigerated to <6°C upon arrival at BC Laboratories, Inc.

Samples were checked for preservation. Where applicable, sample preservation was adjusted in the laboratory.

Holding Time: All analyses and extractions took place within holding times.

Calibration: Initial calibration criteria were met. Frequency and accuracy criteria for initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

Blanks: Method blank was prepared and analyzed at the required frequency. No detection of analytes of interest took place at or above the PQL. Initial and continuing calibration blanks were analyzed at the required frequencies and on an as needed basis.

Laboratory Control Sample and Duplicate: Laboratory control sample analysis was performed at the required frequency. All parameters were within QC limits.



Case Narrative

Analyses Requested: 8260

Submission Number: 17-20267

Instrument ID: MS-V5

Model: HP5973/GC6890

Column Type: Rxi R-624 Sil MS 30m x 0.25mm ID, 1.4 μ m film thickness.

Samples were received refrigerated to <6°C upon arrival at BC Laboratories, Inc. Samples were checked for preservation. Where applicable, sample preservation was adjusted in the laboratory.

Holding Time: All analyses and extractions took place within holding times.

Calibration: Initial calibration criteria were met. Frequency and accuracy criteria for initial calibration verification (ICV) were met. Frequency and accuracy criteria for continuing calibration verification (CCV) were met except the recoveries for Bromomethane in 1713324-CCV3 and 1713324-CCV5 and the recoveries for Chloromethane and 2,2-Dichloropropane in 1713324-CCV5 were outside QC limits. Ending CCV criteria of fifty percent were met. Any compounds that were flagged, but not required, were not noted here.

Blanks: Method blank was prepared and analyzed at the required frequency. No detection of analytes of interest took place at or above the PQL. Initial and continuing calibration blanks were analyzed at the required frequencies and on an as needed basis.

Laboratory Control Sample: Laboratory control sample analysis was performed at the required frequency. All parameters for the requested compounds were within QC limits.

Matrix Spikes and Duplicates: Matrix spike analyses were performed at the required frequencies. All accuracy and precision requirements for the requested compounds were met.

Case Narrative

**Analyses Requested: Gen-Chem.
Submission #: 17-20267**

Method 160.1
Instrument ID: Manual
Sample Volume(s): 100ml/100ml

Method 300.0
Instrument ID: IC-5
Sample Volume(s): 20ml/20ml

Method 310.1
Instrument ID: MET-1
Volume(s): 50ml/50ml

Method 353.2
Instrument ID: Kone-1
Sample Volume(s): 20ml/20ml

Method 415.1
Instrument ID: TOC-2
Volume(s): 100ml/100ml

Method SM4500SD
Instrument ID: SPEC06
Volume(s): 25ml/25ml

Samples were received refrigerated to <6°C upon arrival at BC Laboratories, Inc. Samples were checked for preservation. Where applicable, sample preservation was adjusted in the laboratory.

Holding Time: All analyses and preparations took place within holding times.

Calibration: Initial calibration criteria were met. Frequency and accuracy criteria for initial and continuing calibration verifications were met.

Blanks: Method blank was prepared and analyzed at the required frequency. No detection of analytes of interest took place at or above the PQL. Initial and continuing calibration blanks were analyzed at the required frequencies and on an as needed basis.

Laboratory Control Sample: Laboratory control sample analysis was performed at the required frequency. All parameters were within QC limits.

Matrix Spikes and Duplicates: Matrix spike analyses were performed at the required frequencies. All accuracy and precision requirements were met.

Note: Page 336 was left blank intentionally.

BC

Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1720267 Page 1 of 5

Project Name:		SHIP TO:		DATE: 7/24/2017		COC #: CDC170724	
Alameda Basewide		BC Laboratories 4100 Alles Court Bakersfield, CA 93308 Attn: Tim Green Lab Phone# 651-552-4204		On To:		PAGE: 1 OF 2	
Project Number:	502346006	Phone Number:	(562) 276-3600	Attn: Foster Wheeler	5210 Saw Park Court, Suite 200	Shipment Method:	Ground
Project Manager:	Karen Olivens	Project Phase:	(3) ***	On To:	San Diego, CA 92123	Insight Number:	N/A
Sample Information							
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type		Methods for Analysis	
-1	26PZ01_170724	07/24/17 11:16	WG	N			
-2	26PZ02_170724	07/24/17 10:23	WG	N			
-3	26PZ03_170724	07/24/17 12:05	WG	N			
-4	27EW-01_170724	07/24/17 13:45	WG	N			
-5	27EW-05_170724	07/24/17 11:45	WG	N			
-6	27EW-19_170724	07/24/17 09:09	WG	N			
-7	27EW-20_170724	07/24/17 14:00	WG	N			
-8	27MW06_170724	07/24/17 09:00	WG	N			
-9	27MW07_170724	07/24/17 10:30	WG	N			
-10	27MW08_170724	07/24/17 08:20	WG	N			
-11	27MW09_170724	07/24/17 12:55	WG	N			
-12	513-T-MW02_170724	07/24/17 09:55	WG	N			
Samples Signature:							
Relinquished By/Affiliation: <u>WY Rink</u> Date: 7-24-17 Time: 14:24:57 For Lab Use: Y or N Comments: X=Analyze H=Hold Analysis Request							
Received By: <u>D.J. Bagnall</u> Date: 7-24-17 Time: 14:24:57 Broken Container: Y or N COC seal intact: Y or N Other problems: Y or N WSDOT contacted: Y or N Data contacted: _____							
Relinquished By/Affiliation: <u>D.J. Bagnall</u> Date: 7-24-17 Time: 18:30 Cooler Temperature at receipt: _____ °C NUMBER OF COOLERS SENT: _____							
Received By: <u>D.J. Bagnall</u> Date: 7-24-17 Time: 18:30							
Received By (LAB): <u>Affiliation:</u> <u>Affiliation:</u> Date: 7-24-17 Time: 21:40							

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Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1720267 Page 2 of 5

Project Name:		SHIP TO:		DATE: 7/24/2017	
MNEC Group 9177 Sky Park Court San Diego, CA (858) 278-3600		BC Laboratories 4100 Aliss Court Bakersfield, CA 93308 Attn: Tina Green Lab Phone# 661-812-4204		COC #: COC170724	
Project Number:		Project Contact:		PAGE: 2 OF 2	
Project Manager:		Phone Number:			
Alameda Basewide 5023146006		Project Phase:			
Kevin Ohress					
17-20267					
Sample Information					
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	Comments:
13	EE22_170724	07/24/17 14:05	WG	EB	X=Analyze H=Hold Analysis Request
14	EE23_170724	07/24/17 14:00	WG	EB	Report DL/LQD/LQO with Navy NIRIS valid values
15	TB14_170724	07/24/17 14:00	WG	TB	VOC Short List
4					Major Cations: Na ⁺ , K ⁺ , Ca ²⁺ , Mg ²⁺
5					Aromatics: Nitrate, Nitrite, Chloride, Sulfate
6					
7					
8					
9					
10					
11					
12					
Sampler's Signature: <u>W.R.</u>					
Distinguished By/Affiliation: <u>W.R.</u>					
Received By: <u>J. Brown</u>					
Distinguished By/Affiliation: <u>J. Brown</u>					
Received By: <u>J. Brown</u>					
Distinguished By/Affiliation: <u>J. Brown</u>					
Received By (LAB): <u>W.H.</u>					
Date: 7/24/17 Time: 14:45 Does COC match samples: Y or N					
Date: 7/24/17 Time: 14:45 Broken Container: Y or N					
COC test intact: Y or N					
Other problems: Y or N					
WSDOT contacted: Y or N					
Date contacted: _____					
Cooler Temperature at receipt: _____ °C					
NUMBER OF COOLERS SENT: _____					
For Lab Use					
Date: 7/24/17 Time: 14:45					
Comments: X=Analyze H=Hold Analysis Request					
VOC Short List: Benzene and Ethylbenzene Only					
Major Cations: Na ⁺ , K ⁺ , Ca ²⁺ , Mg ²⁺					
Aromatics: Nitrate, Nitrite, Chloride, Sulfate					
Date: 7/24/17 Time: 18:30					
Date: 7/24/17 Time: 18:30					
Date: 7/24/17 Time: 21:00					
Date: 7/24/17 Time: 24:00					

BC

Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1720267 Page 3 of 5

BC LABORATORIES INC.		COOLER RECEIPT FORM			Page <u>1</u> Of <u>3</u>					
Submission #: <u>17-20267</u>										
SHIPPING INFORMATION			SHIPPING CONTAINER		FREE LIQUID					
Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Ontrac <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____	Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		YES <input type="checkbox"/> NO <input type="checkbox"/> <u>W / S</u>							
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments:										
Custody Seals <input type="checkbox"/> Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: Insert Yes <input type="checkbox"/> No <input type="checkbox"/>										
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>						
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Emissivity: <u>0.95</u>	Container: <u>PE Tote</u>	Thermometer ID: <u>208</u>	Date/Time: <u>1/24/17 2134</u>	Analyst Init: <u>BNK</u>					
Temperature: (A) <u>1.4</u> °C / (C) <u>23.7</u> °C										
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr ¹⁴										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	
40ml VOA VIAL	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	
QT EPA 1654										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL <u>RSK</u>			<u>DEF</u>				<u>DEF</u>	<u>DEF</u>	<u>DEF</u>	
QT EPA 50/60/80/100										
QT EPA 515.1/6150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
1oz / 16oz / 32oz AMBER										
1oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEFLON BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
JUMMA CANISTER										
Comments: _____						Date/Time: <u>1-24-2010</u>	Rev 21 05/23/2016			
Sample Numbering Completed By: _____						E:\WFDoc\WordPerfect\LAB_DOC\Forms\15SAMRECRev 20				
= Actual / C = Corrected										



Chain of Custody and Cooler Receipt Form for 1720267 Page 4 of 5

BC LABORATORIES INC.		COOLER RECEIPT FORM					Page <u>2</u> of <u>3</u>				
Submission #: 17-20267											
SHIPPING INFORMATION						SHIPPING CONTAINER			FREE LIQUID		
Fed Ex <input type="checkbox"/>	UPS <input type="checkbox"/>	Ontrac <input type="checkbox"/>	Hand Delivery <input type="checkbox"/>	BC Lab Field Service <input checked="" type="checkbox"/>	Other <input type="checkbox"/> (Specify) _____	Ice Chest <input checked="" type="checkbox"/>	None <input type="checkbox"/>	Box <input type="checkbox"/>	Other <input type="checkbox"/> (Specify) _____	YES <input type="checkbox"/>	NO <input type="checkbox"/>
						W / S					
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: _____											
Custody Seals Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: _____ Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>											
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>							
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.95 Container PETB Thermometer ID: 208		Date/Time 1/24/17 2134							
		Temperature: (A) 1.9 °C / (C) 7.9 °C		Analyst Init PNC							
SAMPLE CONTAINERS	SAMPLE NUMBERS										
	1	2	3	4	5	6	7	8	9	10	
QT PE UNPRES											
4oz / 8oz / 16oz PE UNPRES											
2oz Cr ⁶⁺											
QT INORGANIC CHEMICAL METALS											
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz											
PT CYANIDE											
PT NITROGEN FORMS											
PT TOTAL SULFIDE											
2oz NITRATE / NITRITE											
PT TOTAL ORGANIC CARBON											
PT CHEMICAL OXYGEN DEMAND											
PTA PHENOLICS											
40ml VOA VIAL TRAVEL BLANK											
40ml VOA VIAL	ABC	ABC	ABC	PDC							
QT EPA 1664											
PT ODOR											
RADIOLOGICAL											
BACTERIOLOGICAL											
40 ml VOA VIAL-204	PSK	DEF									
QT EPA 508/608/8080											
QT EPA 515.1/8150											
QT EPA 525											
QT EPA 525 TRAVEL BLANK											
40ml EPA 547											
40ml EPA 531.1											
8oz EPA 548											
QT EPA 549											
QT EPA 8015M											
QT EPA 8270											
8oz / 16oz / 32oz AMBER											
8oz / 16oz / 32oz JAR											
SOIL SLEEVE											
PCB VIAL											
PLASTIC BAG											
TEDLAR BAG											
FERROUS IRON											
ENCORE											
SMART KIT											
SUMMA CANISTER											
Comments: _____	Date/Time: 1/24/2010										
Sample Numbering Completed By: _____	Rev 21 05/23/2016										
A = Actual / C = Corrected	(S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAWRECver201)										

BC

Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1720267 Page 5 of 5

BC LABORATORIES INC.		COOLER RECEIPT FORM						Page <u>4</u> Of <u>4</u> <u>3 of 3</u>	
Submission #: 17-20267									
SHIPPING INFORMATION				SHIPPING CONTAINER			FREE LIQUID		
Fed Ex <input type="checkbox"/>	UPS <input type="checkbox"/>	Ontrac <input type="checkbox"/>	Hand Delivery <input type="checkbox"/>	Ice Chest <input checked="" type="checkbox"/>	None <input type="checkbox"/>	Box <input type="checkbox"/>	YES <input type="checkbox"/>	NO <input type="checkbox"/>	
BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				Other <input type="checkbox"/> (Specify) _____			(W) / S		
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: _____									
Custody Seals		Ice Chest <input type="checkbox"/>	Containers <input type="checkbox"/>	None <input checked="" type="checkbox"/> Comments: _____					
Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>		Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.95		Container: 16 TBS		Thermometer ID: 208		Date/Time 7/24/17 2134	
		Temperature: (A) 3.4 °C / (C) 3.7 °C						Analyst Init. PNC	
SAMPLE CONTAINERS	SAMPLE NUMBERS								
	1	2	3	4	5	6	7	8	9
QT PE UNPRES PT				18	✓9	✓10	✓11	✓12	✓13
4oz / 8oz / 16oz PR UNPRES	A	DFF	DEF	GH					
2oz Cr ⁶⁺									
QT INORGANIC CHEMICAL METALS									
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz									
PT CYANIDE									
PT NITROGEN FORMS									
PT TOTAL SULFIDE	G	G	G	I	H	H	H	H	
2oz NITRATE / NITRITE				J	I	I	I	I	
PT TOTAL ORGANIC CARBON									
PT CHEMICAL OXYGEN DEMAND									
PTA PHENOLICS									
40ml VOA VIAL TRAVEL BLANK									
40ml VOA VIAL									
QT EPA 1664									
PT ODOR									
RADIOLOGICAL									
BACTERIOLOGICAL									
40 ml VOA VIAL - 504									
QT EPA 508/608/6080									
QT EPA 515.1/8150									
QT EPA 525									
QT EPA 525 TRAVEL BLANK									
40ml EPA 547									
40ml EPA 531.1									
8oz EPA 543									
QT EPA 549									
QT EPA 8015M									
QT EPA 8270									
8oz / 16oz / 32oz AMBER									
8oz / 16oz / 32oz JAR									
SOIL SLEEVE									
PCB VIAL									
PLASTIC BAG									
TEDLAR BAG									
FERROUS IRON									
ENCORE									
SMART KIT									
SUMMA CANISTER									
Comments: _____									
Sample Numbering Completed By: _____	Date/Time: 7/24/17 2134								
Actual / C = Corrected	Rev 21 05/23/2016 E:\WP\Doc\WordPerfect\LAB_DOC\810\WS1SAWIEChv 211								



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG: 17-20267

Class: GC

Method: RSK-175M



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSES DATA PACKAGE COVER PAGE**RSK-175M**

Laboratory: BC Laboratories

SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Client Sample Id:27EW-01_17072427MW06_17072427MW07_17072427MW08_17072427MW09_170724**Lab Sample Id:**1720267-041720267-081720267-091720267-101720267-11

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature:

Name: Sara Guron

Date:

08-24-2017

Title:

QA/QC Manager



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS**RSK-175M****Laboratory:** BC Laboratories**SDG:** 17-20267**Client:** AMEC Environmental & Infrastructure- \$AMCN**Project:** Alameda**Matrix:** Water**Instrument:** GC-V1

Analyte	DL	LOD	LOQ	Units
Methane	0.00013	0.0006	0.001	mg/L
Ethane	0.00049	0.001	0.002	mg/L
Ethene	0.00058	0.001	0.002	mg/L



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET
RSK-175M

27EW-01_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-04 File ID: 04AUG15.D
Sampled: 07/24/17 13:45 Prepared: 08/03/17 15:07 Analyzed: 08/04/17 09:25
Solids: Preparation: RSK-175M Initial/Final: 1 ml / 1 ml
Batch: B[H0355 Sequence: 1713774 Calibration: 1702007 Instrument: GC-V1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	DL	LOD	LOQ	Q
74-82-8	Methane	1	0.049	0.00013	0.00060	0.0010	
74-84-0	Ethane	1	0.0010	0.00049	0.0010	0.0020	U
74-85-1	Ethene	1	0.0010	0.00058	0.0010	0.0020	U

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET
RSK-175M

27MW06_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-08 File ID: 04AUG16.D
Sampled: 07/24/17 09:00 Prepared: 08/03/17 15:07 Analyzed: 08/04/17 09:39
Solids: Preparation: RSK-175M Initial/Final: 1 ml / 1 ml
Batch: B[H0355 Sequence: 1713774 Calibration: 1702007 Instrument: GC-V1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	DL	LOD	LOQ	Q
74-82-8	Methane	1	0.00060	0.00013	0.00060	0.0010	U
74-84-0	Ethane	1	0.0010	0.00049	0.0010	0.0020	U
74-85-1	Ethene	1	0.0010	0.00058	0.0010	0.0020	U

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

RSK-175M

27MW07_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-09 File ID: 04AUG17.D
Sampled: 07/24/17 10:30 Prepared: 08/03/17 15:07 Analyzed: 08/04/17 09:43
Solids: Preparation: RSK-175M Initial/Final: 1 ml / 1 ml
Batch: B[H0355 Sequence: 1713774 Calibration: 1702007 Instrument: GC-V1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	DL	LOD	LOQ	Q
74-82-8	Methane	1	0.00060	0.00013	0.00060	0.0010	U
74-84-0	Ethane	1	0.0010	0.00049	0.0010	0.0020	U
74-85-1	Ethene	1	0.0010	0.00058	0.0010	0.0020	U

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

RSK-175M

27MW08_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-10 File ID: 04AUG18.D
Sampled: 07/24/17 08:20 Prepared: 08/03/17 15:07 Analyzed: 08/04/17 09:48
Solids: Preparation: RSK-175M Initial/Final: 1 ml / 1 ml
Batch: B[H0355 Sequence: 1713774 Calibration: 1702007 Instrument: GC-V1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	DL	LOD	LOQ	Q
74-82-8	Methane	1	0.0017	0.00013	0.00060	0.0010	
74-84-0	Ethane	1	0.0010	0.00049	0.0010	0.0020	U
74-85-1	Ethene	1	0.0010	0.00058	0.0010	0.0020	U

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET
RSK-175M

27MW09_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-11 File ID: 04AUG19.D
Sampled: 07/24/17 12:55 Prepared: 08/03/17 15:07 Analyzed: 08/04/17 09:57
Solids: Preparation: RSK-175M Initial/Final: 1 ml / 1 ml
Batch: B[H]0355 Sequence: 1713774 Calibration: 1702007 Instrument: GC-V1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	DL	LOD	LOQ	Q
74-82-8	Methane	10	0.81	0.0013	0.0060	0.010	D
74-84-0	Ethane	10	0.010	0.0049	0.010	0.020	UD
74-85-1	Ethene	10	0.010	0.0058	0.010	0.020	UD

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

PREPARATION BATCH SUMMARY**RSK-175M**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Batch: B[H0355 Batch Matrix: Water Preparation: RSK-175M

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
27EW-01_170724	1720267-04	04AUG15.D	08/03/17 15:07	
27MW06_170724	1720267-08	04AUG16.D	08/03/17 15:07	
27MW07_170724	1720267-09	04AUG17.D	08/03/17 15:07	
27MW08_170724	1720267-10	04AUG18.D	08/03/17 15:07	
27MW09_170724	1720267-11	04AUG19.D	08/03/17 15:07	
Blank	B[H0355-BLK1	04AUG04.D	08/03/17 15:07	
LCS	B[H0355-BS1	04AUG05.D	08/03/17 15:07	
LCS Dup	B[H0355-BSD1	04AUG06.D	08/03/17 15:07	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD BLANK DATA SHEET RSK-175M

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: B[H0355-BLK1 File ID: 04AUG04.D
Prepared: 08/03/17 15:07 Preparation: RSK-175M Initial/Final: 1 ml / 1 ml
Analyzed: 08/04/17 06:56 Instrument: GC-V1
Batch: B[H0355 Sequence: 1713774 Calibration: 1702007

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
74-82-8	Methane	0.00060	0.00013	0.00060	0.0010	U
74-84-0	Ethane	0.0010	0.00049	0.0010	0.0020	U
74-85-1	Ethene	0.0010	0.00058	0.0010	0.0020	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

LCS RECOVERY

RSK-175M

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>		
Batch:	<u>B[H0355</u>	Laboratory ID:	<u>B[H0355-BS1</u>
Preparation:	<u>RSK-175M</u>	Initial/Final:	<u>1 ml / 1 ml</u>

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC. #	QC LIMITS REC.
Methane	0.010843	0.0096391	88.9	73 - 125
Ethane	0.021736	0.022336	103	74 - 131
Ethene	0.028446	0.025757	90.5	72 - 133

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC. #	% RPD #	RPD	QC LIMITS REC.
Methane	0.010843	0.0099096	91.4	2.77	20	73 - 125
Ethane	0.021736	0.023406	108	4.68	20	74 - 131
Ethene	0.028446	0.027377	96.2	6.10	20	72 - 133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY

RSK-175M

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1701454 Instrument: GC-V1
Matrix: Water Calibration: 1702007

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	1701454-CAL4	27JAN02.D	01/27/17 07:43
Cal Standard	1701454-CAL3	27JAN03.D	01/27/17 07:47
Cal Standard	1701454-CAL2	27JAN04.D	01/27/17 07:52
Cal Standard	1701454-CAL1	27JAN05.D	01/27/17 07:56
Initial Cal Check	1701454-ICV1	27JAN06.D	01/27/17 08:40
Initial Cal Blank	1701454-ICB1	27JAN07.D	01/27/17 08:45



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY RSK-175M

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1713774 Instrument: GC-V1
Matrix: Water Calibration: 1702007

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	1713774-ICV1	27JAN06.D	01/27/17 08:40
Initial Cal Blank	1713774-ICB1	27JAN07.D	01/27/17 08:45
Calibration Check	1713774-CCV1	04AUG02.D	08/04/17 06:36
Calibration Blank	1713774-CCB1	04AUG03.D	08/04/17 06:52
Blank	B[H0355-BLK1	04AUG04.D	08/04/17 06:56
LCS	B[H0355-BS1	04AUG05.D	08/04/17 06:59
LCS Dup	B[H0355-BSD1	04AUG06.D	08/04/17 07:04
Calibration Check	1713774-CCV2	04AUG10.D	08/04/17 07:33
Calibration Blank	1713774-CCB2	04AUG11.D	08/04/17 07:36
27EW-01_170724	1720267-04	04AUG15.D	08/04/17 09:25
27MW06_170724	1720267-08	04AUG16.D	08/04/17 09:39
27MW07_170724	1720267-09	04AUG17.D	08/04/17 09:43
27MW08_170724	1720267-10	04AUG18.D	08/04/17 09:48
27MW09_170724	1720267-11	04AUG19.D	08/04/17 09:57
Calibration Check	1713774-CCV3	04AUG22.D	08/04/17 10:29
Calibration Blank	1713774-CCB3	04AUG23.D	08/04/17 10:36
Calibration Check	1713774-CCV4	04AUG34.D	08/04/17 12:45
Calibration Blank	1713774-CCB4	04AUG35.D	08/04/17 12:49
Calibration Check	1713774-CCV5	04AUG40.D	08/04/17 14:31
Calibration Blank	1713774-CCB5	04AUG41.D	08/04/17 14:39



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK

RSK-175M

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>GC-V1</u>	Calibration:	<u>1702007</u>
Lab File ID:	<u>27JAN06.D</u>	Calibration Date:	<u>01/27/17 07:43</u>
Sequence:	<u>1701454</u>	Injection Date:	<u>01/27/17</u>
Lab Sample ID:	<u>1701454-ICV1</u>	Injection Time:	<u>08:40</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Methane	A	10.843	12.174	605292.5	679565.1		12.3	15
Ethane	A	21.736	24.956	580938.9	666976.9		14.8	15
Ethene	A	28.446	31.820	402477.4	450214.1		11.9	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK

RSK-175M

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>GC-V1</u>	Calibration:	<u>1702007</u>
Lab File ID:	<u>27JAN06.D</u>	Calibration Date:	<u>01/27/17 07:43</u>
Sequence:	<u>1713774</u>	Injection Date:	<u>01/27/17</u>
Lab Sample ID:	<u>1713774-ICV1</u>	Injection Time:	<u>08:40</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Methane	A	10.843	12.174	605292.5	679565.1		12.3	15
Ethane	A	21.736	24.956	580938.9	666976.9		14.8	15
Ethene	A	28.446	31.820	402477.4	450214.1		11.9	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK

RSK-175M

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>GC-V1</u>	Calibration:	<u>1702007</u>
Lab File ID:	<u>04AUG02.D</u>	Calibration Date:	<u>01/27/17 07:43</u>
Sequence:	<u>1713774</u>	Injection Date:	<u>08/04/17</u>
Lab Sample ID:	<u>1713774-CCV1</u>	Injection Time:	<u>06:36</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Methane	A	10.843	9.6314	605292.5	537655.7		-11.2	15
Ethane	A	21.736	23.002	580938.9	614739.6		5.8	15
Ethene	A	28.446	26.449	402477.4	374222		-7.0	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK

RSK-175M

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>GC-V1</u>	Calibration:	<u>1702007</u>
Lab File ID:	<u>04AUG10.D</u>	Calibration Date:	<u>01/27/17 07:43</u>
Sequence:	<u>1713774</u>	Injection Date:	<u>08/04/17</u>
Lab Sample ID:	<u>1713774-CCV2</u>	Injection Time:	<u>07:33</u>

COMPOUND	(1) _{CAL} TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Methane	A	10.843	9.6811	605292.5	540430		-10.7	15
Ethane	A	21.736	23.268	580938.9	621842.6		7.0	15
Ethene	A	28.446	28.361	402477.4	401280.3		-0.3	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK

RSK-175M

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>GC-V1</u>	Calibration:	<u>1702007</u>
Lab File ID:	<u>04AUG22.D</u>	Calibration Date:	<u>01/27/17 07:43</u>
Sequence:	<u>1713774</u>	Injection Date:	<u>08/04/17</u>
Lab Sample ID:	<u>1713774-CCV3</u>	Injection Time:	<u>10:29</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Methane	A	10.843	9.4113	605292.5	525368.7		-13.2	15
Ethane	A	21.736	23.514	580938.9	628441.8		8.2	15
Ethene	A	28.446	26.706	402477.4	377864.7		-6.1	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK

RSK-175M

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>GC-V1</u>	Calibration:	<u>1702007</u>
Lab File ID:	<u>04AUG34.D</u>	Calibration Date:	<u>01/27/17 07:43</u>
Sequence:	<u>1713774</u>	Injection Date:	<u>08/04/17</u>
Lab Sample ID:	<u>1713774-CCV4</u>	Injection Time:	<u>12:45</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Methane	A	10.843	10.499	605292.5	586080.5		-3.2	15
Ethane	A	21.736	22.929	580938.9	612790.8		5.5	15
Ethene	A	28.446	26.481	402477.4	374668.8		-6.9	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK

RSK-175M

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>GC-V1</u>	Calibration:	<u>1702007</u>
Lab File ID:	<u>04AUG40.D</u>	Calibration Date:	<u>01/27/17 07:43</u>
Sequence:	<u>1713774</u>	Injection Date:	<u>08/04/17</u>
Lab Sample ID:	<u>1713774-CCV5</u>	Injection Time:	<u>14:31</u>

COMPOUND	(1) _{CAL} TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Methane	A	10.843	10.510	605292.5	586711.2		-3.1	15
Ethane	A	21.736	24.451	580938.9	653468.4		12.5	15
Ethene	A	28.446	28.092	402477.4	397464		-1.2	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION STANDARDS

RSK-175M

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1701454 Instrument: GC-V1
Calibration: 1702007

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
7B07024	RSK-175M CAL4	1701454-CAL4	27JAN02.D	01/27/17 07:43
7B07023	RSK-175M CAL3	1701454-CAL3	27JAN03.D	01/27/17 07:47
7B07022	RSK-175M CAL2	1701454-CAL2	27JAN04.D	01/27/17 07:52
7B07021	RSK-175M CAL1	1701454-CAL1	27JAN05.D	01/27/17 07:56



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA RSK-175M

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Calibration: 1702007 Instrument: GC-V1
Matrix: Water Calibration Date: 01/27/17 07:43

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Methane	1.0843	637975.6	10.843	692654	108.43	493653.4	542.15	596887.1				
Ethane	2.1736	586625.4	21.736	661756.1	217.36	501173.7	1086.8	574200.6				
Ethene	2.8446	439934.3	28.446	440075.9	284.46	333630.7	1422.3	396268.7				



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA (Continued)**RSK-175M**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Calibration: 1702007 Instrument: GC-V1
Matrix: Water Calibration Date: 01/27/17 07:43

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Methane	605292.5	13.89926	0.73	1.372967E-02			20	
Ethane	580938.9	11.31896	2.0825	0.4599198			20	
Ethene	402477.4	12.50156	1.7325	0.5526404			20	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

HOLDING TIME SUMMARY**RSK-175M**Laboratory: BC Laboratories SDG: 17-20267Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
27EW-01_170724	07/24/17 13:45	07/24/17 21:40	08/03/17 15:07	11.00	14.00	08/04/17 09:25	11.00	14.00	
27MW06_170724	07/24/17 09:00	07/24/17 21:40	08/03/17 15:07	11.00	14.00	08/04/17 09:39	11.00	14.00	
27MW07_170724	07/24/17 10:30	07/24/17 21:40	08/03/17 15:07	11.00	14.00	08/04/17 09:43	11.00	14.00	
27MW08_170724	07/24/17 08:20	07/24/17 21:40	08/03/17 15:07	11.00	14.00	08/04/17 09:48	11.00	14.00	
27MW09_170724	07/24/17 12:55	07/24/17 21:40	08/03/17 15:07	11.00	14.00	08/04/17 09:57	11.00	14.00	

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data From Instrument GC-V1



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Samples

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG15.D Vial: 15
Acq On : 4 Aug 2017 9:25 am Operator: JH2
Sample : 1720267-04 Inst : GC-V1
Misc : 1 E RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 9:37 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

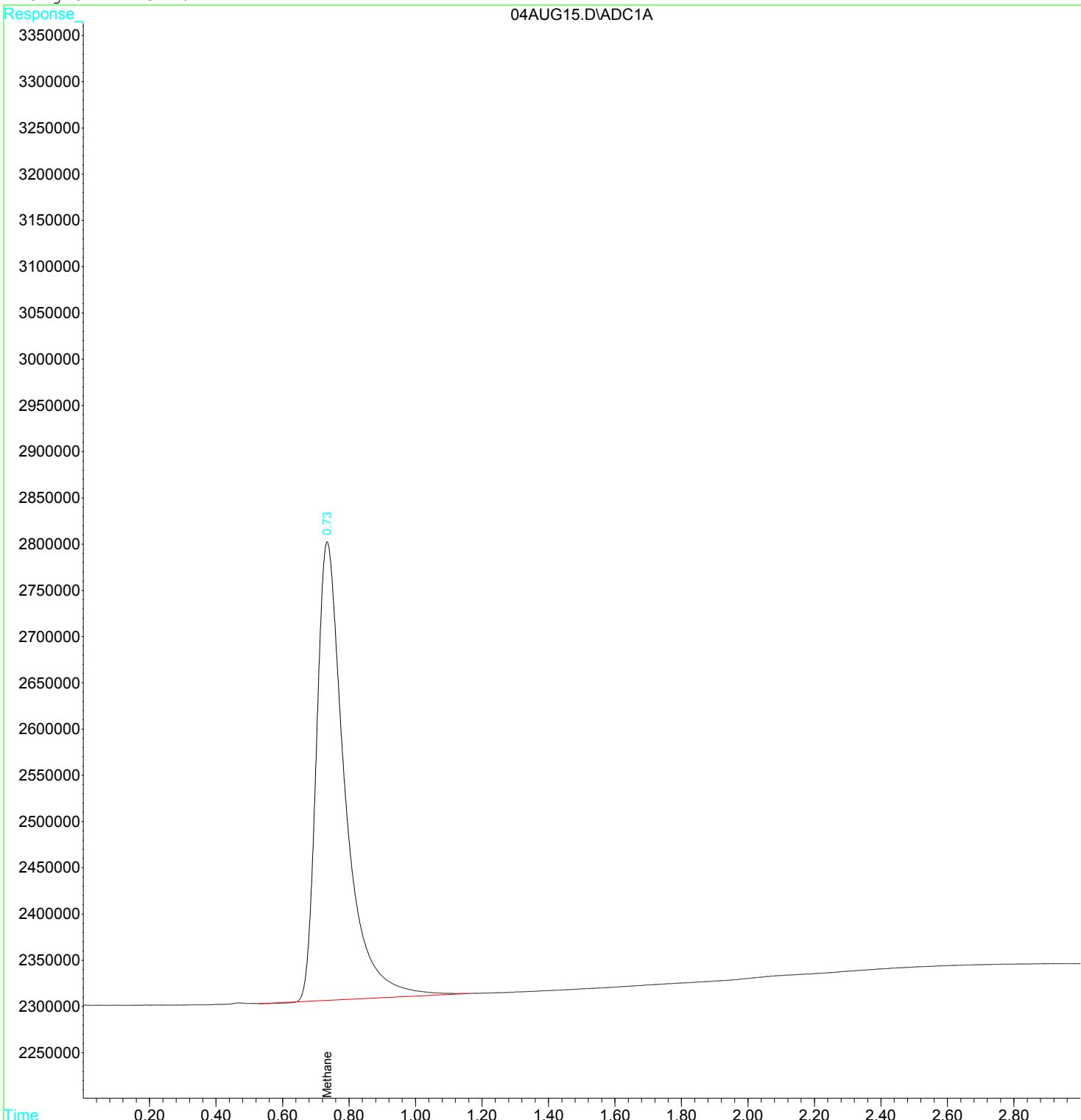
Compound	R.T.	Response	Conc	Units
<hr/>				
Target Compounds				
1) m Methane	0.73	29424089	48.6113	ug/L
2) m Ethene	0.00	0	N.D.	ug/L
3) m Ethane	0.00	0	N.D.	ug/L

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG15.D Vial: 15
Acq On : 4 Aug 2017 9:25 am Operator: JH2
Sample : 1720267-04 Inst : GC-V1
Misc : 1 E RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 9:37 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

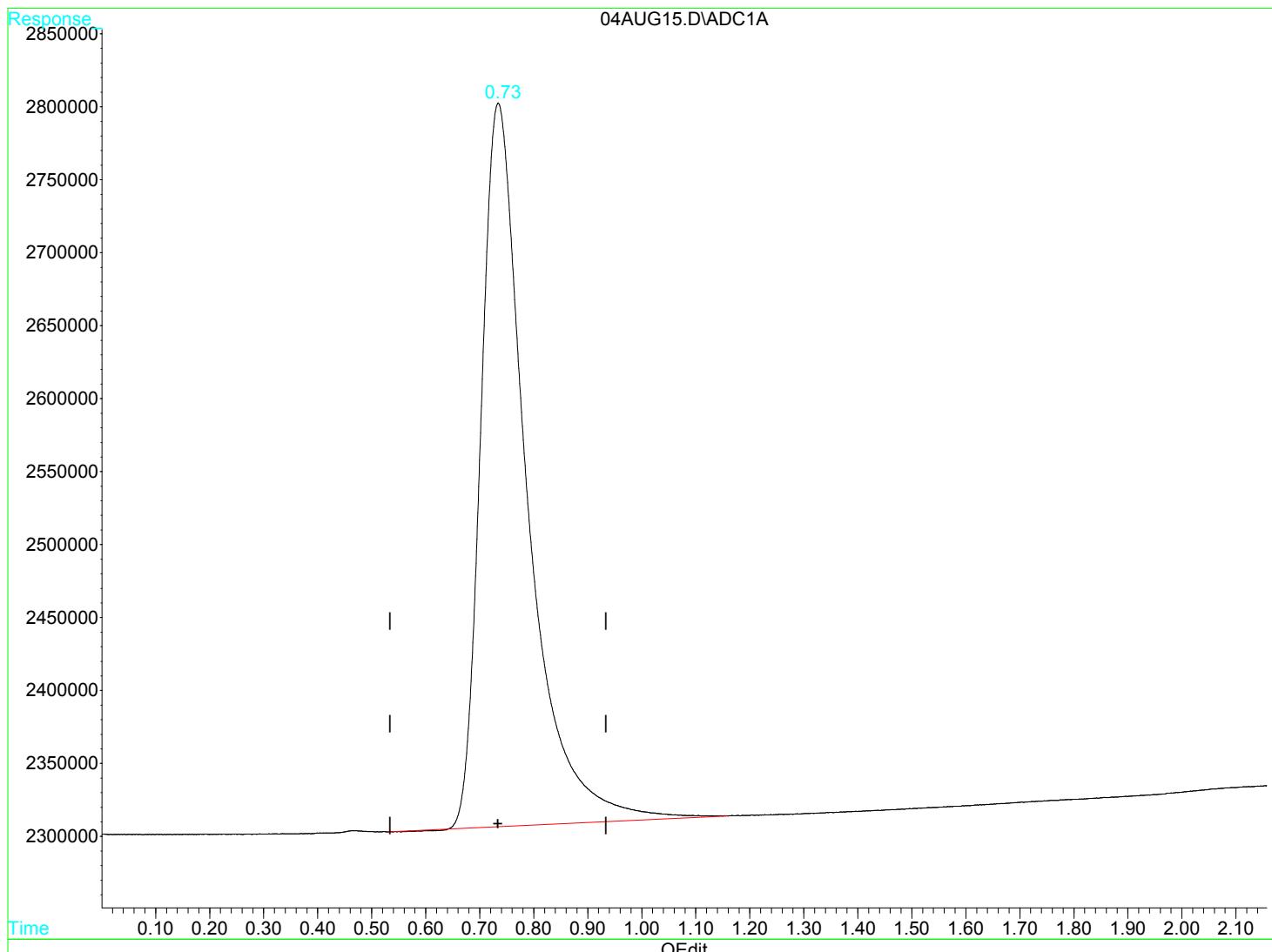
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG15.D Vial: 15
Acq On : 4 Aug 2017 9:25 am Operator: JH2
Sample : 1720267-04 Inst : GC-V1
Misc : 1 E RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 9:37 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG16.D Vial: 16
Acq On : 4 Aug 2017 9:39 am Operator: JH2
Sample : 1720267-08 Inst : GC-V1
Misc : 1 E RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:05 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

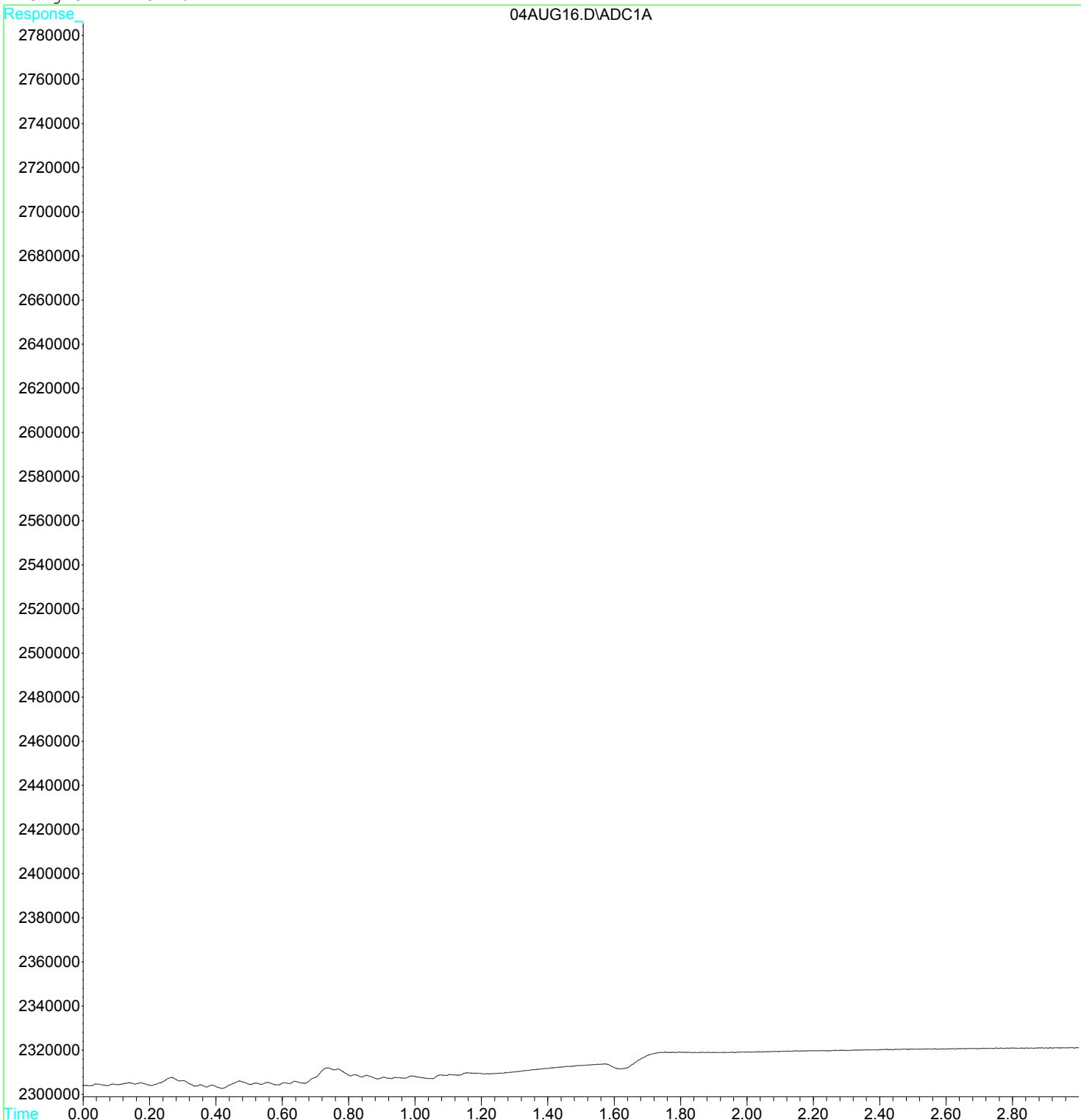
Compound	R.T.	Response	Conc	Units
<hr/>				
Target Compounds				
1) m Methane	0.00	0	N.D.	ug/L d
2) m Ethene	0.00	0	N.D.	ug/L d
3) m Ethane	0.00	0	N.D.	ug/L d

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG16.D Vial: 16
Acq On : 4 Aug 2017 9:39 am Operator: JH2
Sample : 1720267-08 Inst : GC-V1
Misc : 1 E RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:05 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG17.D Vial: 17
Acq On : 4 Aug 2017 9:43 am Operator: JH2
Sample : 1720267-09 Inst : GC-V1
Misc : 1 E RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:06 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

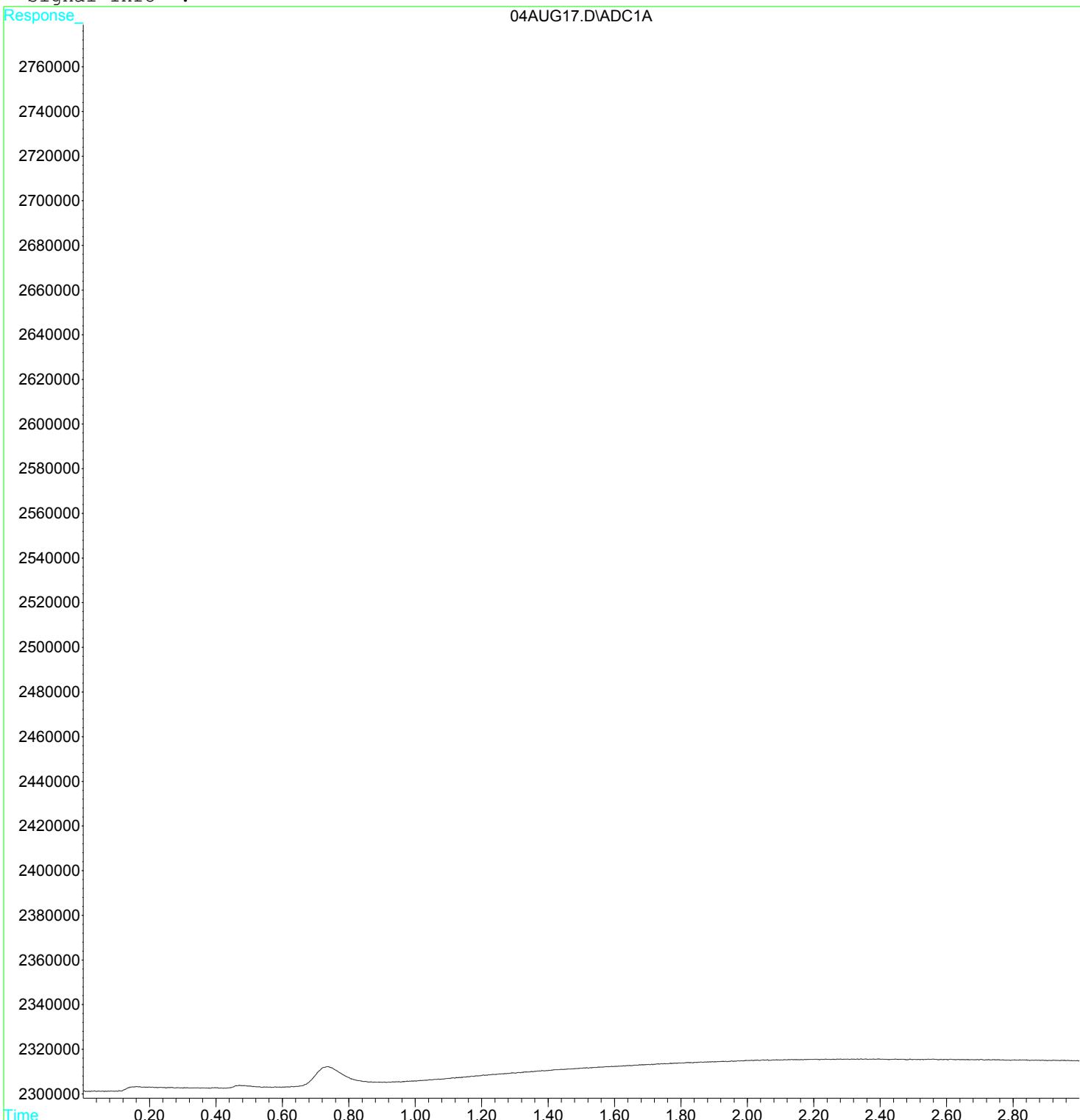
Compound	R.T.	Response	Conc	Units
<hr/>				
Target Compounds				
1) m Methane	0.00	0	N.D.	ug/L d
2) m Ethene	0.00	0	N.D.	ug/L d
3) m Ethane	0.00	0	N.D.	ug/L d

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG17.D Vial: 17
Acq On : 4 Aug 2017 9:43 am Operator: JH2
Sample : 1720267-09 Inst : GC-V1
Misc : 1 E RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:06 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG18.D Vial: 18
Acq On : 4 Aug 2017 9:48 am Operator: JH2
Sample : 1720267-10 Inst : GC-V1
Misc : 1 E RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:06 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

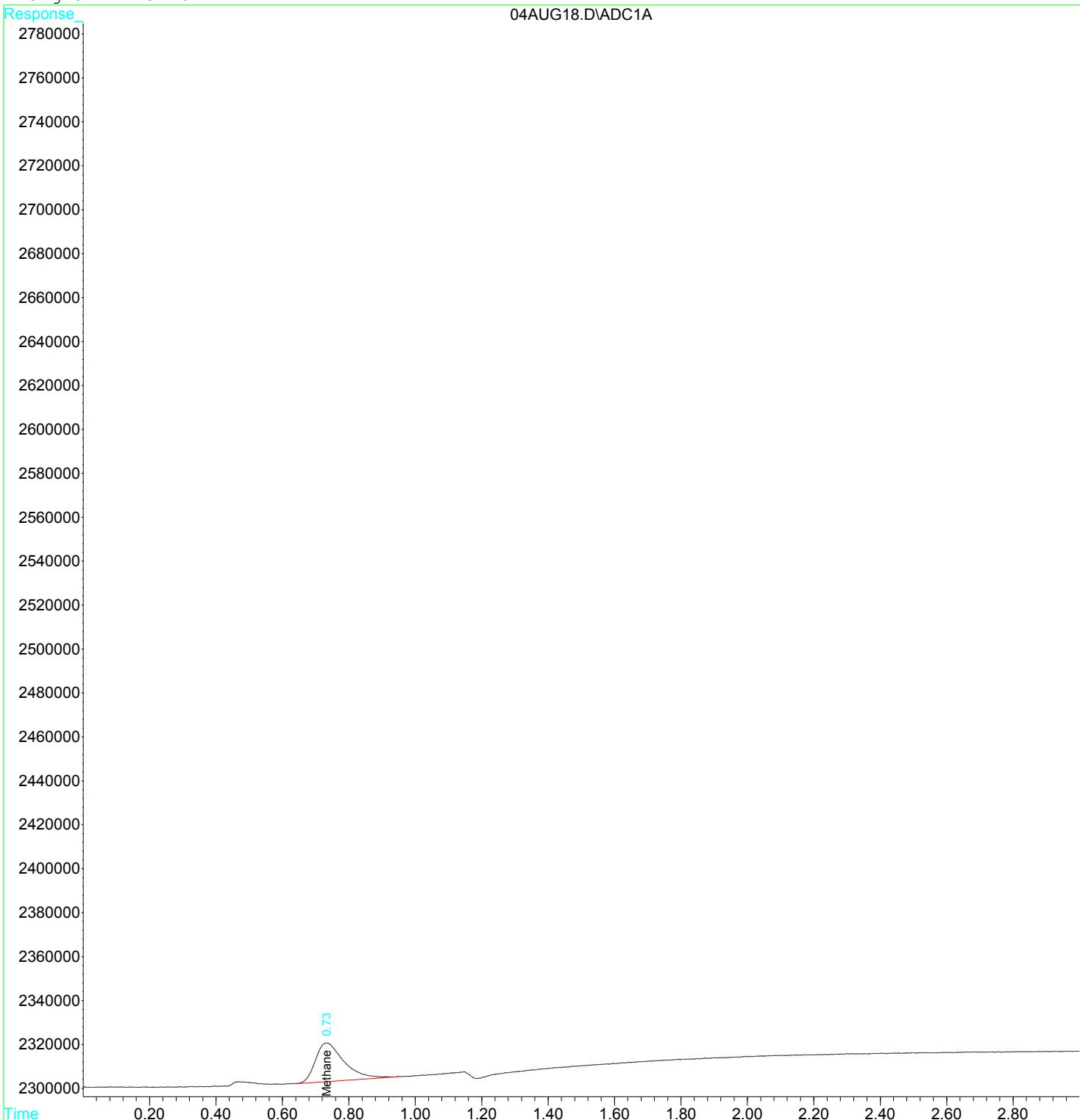
Compound	R.T.	Response	Conc	Units
<hr/>				
Target Compounds				
1) m Methane	0.73	1047698	1.7309	ug/L m
2) m Ethene	0.00	0	N.D.	ug/L d
3) m Ethane	0.00	0	N.D.	ug/L

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG18.D Vial: 18
Acq On : 4 Aug 2017 9:48 am Operator: JH2
Sample : 1720267-10 Inst : GC-V1
Misc : 1 E RSK-175 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:06 2017 Quant Results File: RSK175.RES

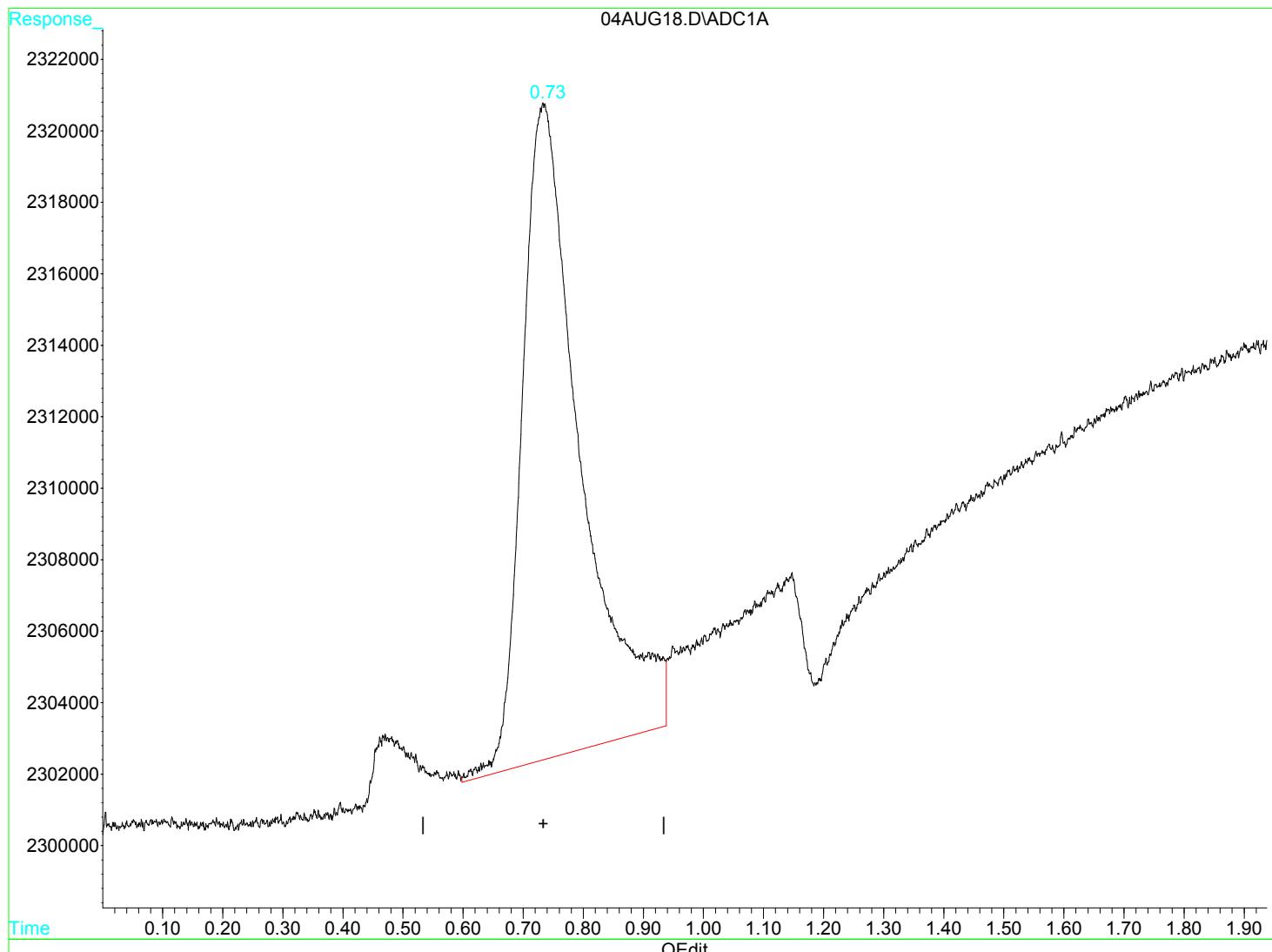
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



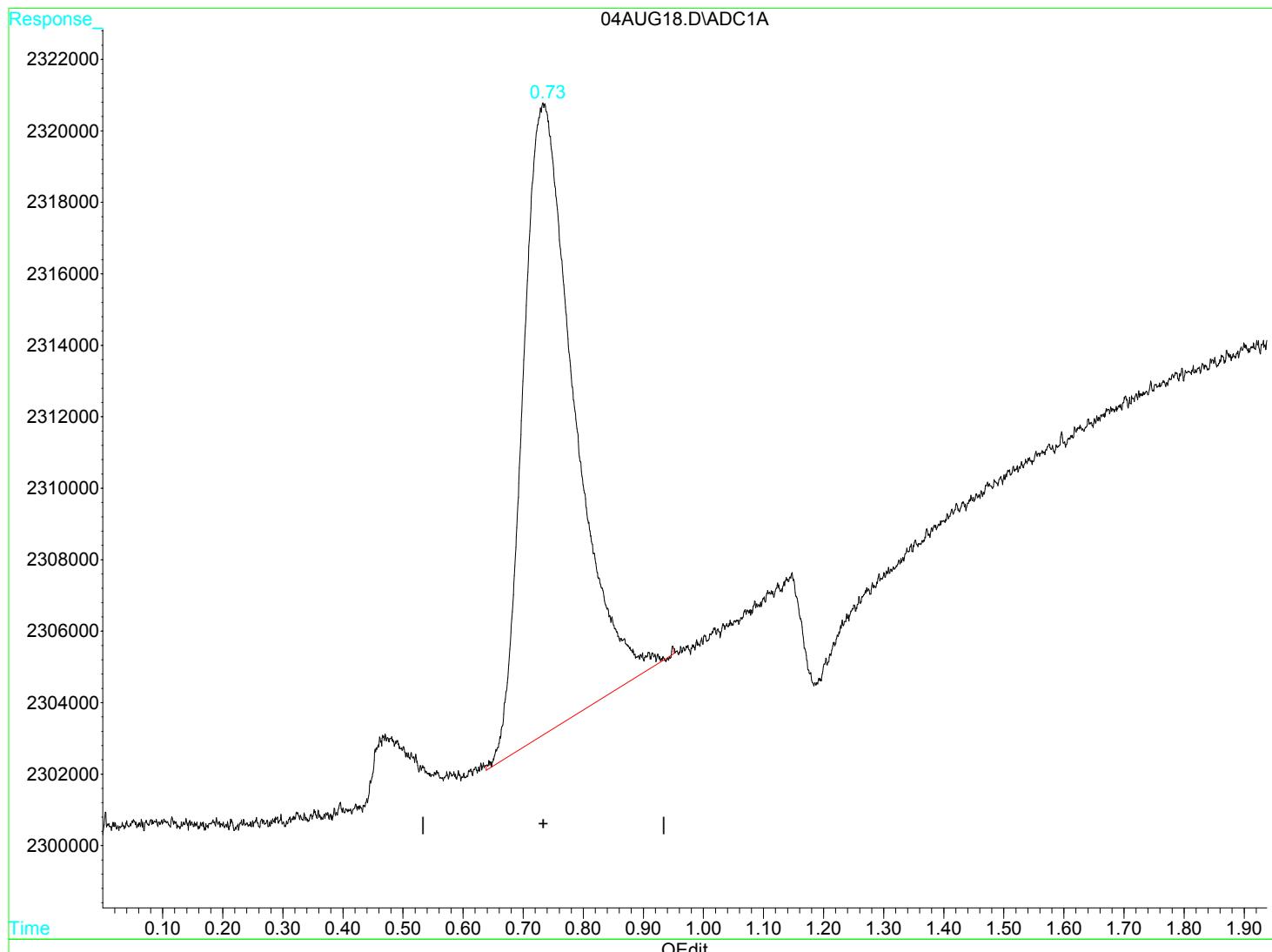
Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG18.D Vial: 18
 Acq On : 4 Aug 2017 9:48 am Operator: JH2
 Sample : 1720267-10 Inst : GC-V1
 Misc : 1 E RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 9:51 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG18.D Vial: 18
 Acq On : 4 Aug 2017 9:48 am Operator: JH2
 Sample : 1720267-10 Inst : GC-V1
 Misc : 1 E RSK-175 250uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 9:51 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG19.D Vial: 19
Acq On : 4 Aug 2017 9:57 am Operator: JH2
Sample : 1720267-11 Inst : GC-V1
Misc : 10 E RSK-175 25uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:07 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

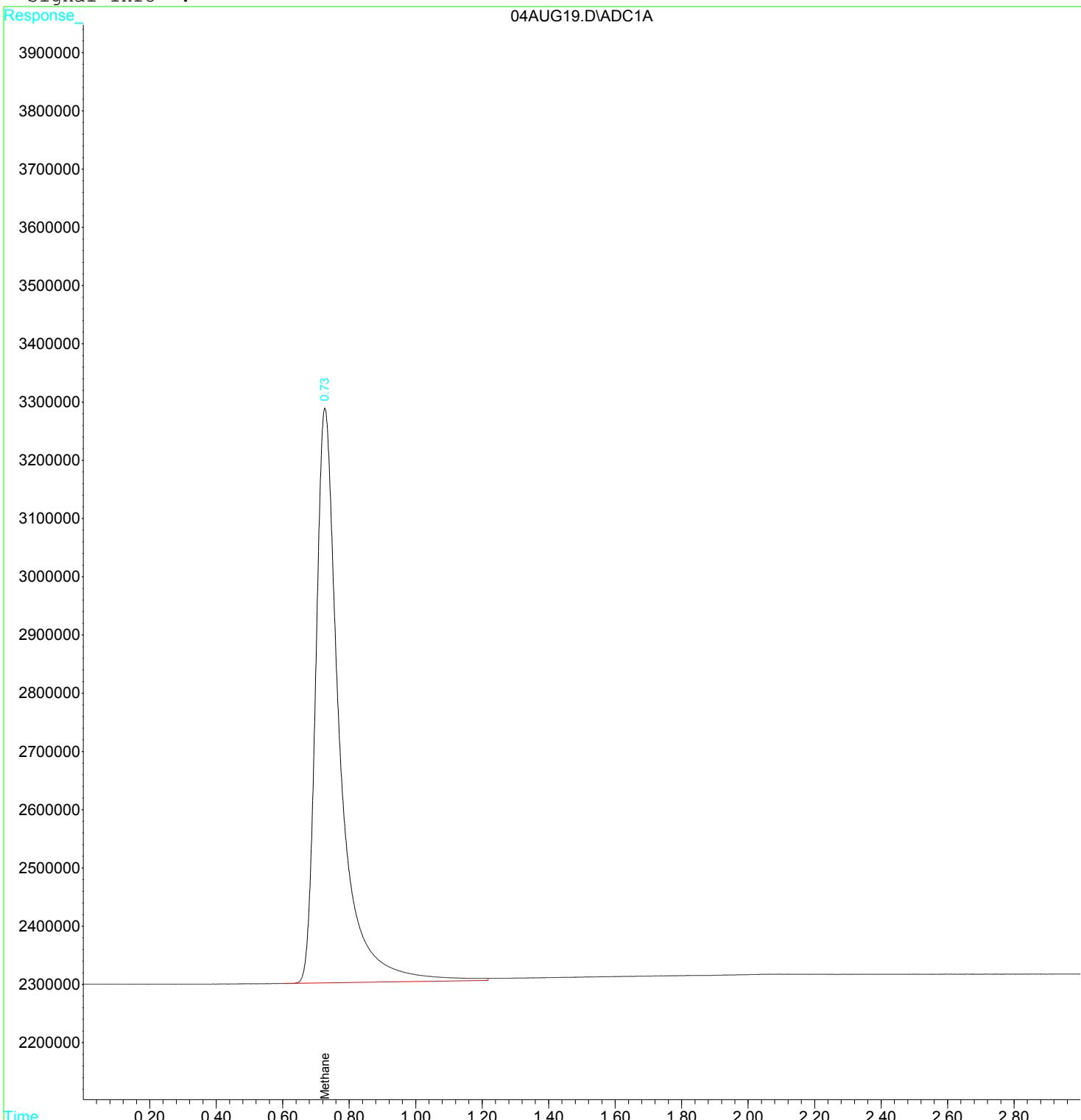
Compound	R.T.	Response	Conc	Units
<hr/>				
Target Compounds				
1) m Methane	0.73	49251862	81.3687	ug/L
2) m Ethene	0.00	0	N.D.	ug/L d
3) m Ethane	0.00	0	N.D.	ug/L d

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG19.D Vial: 19
Acq On : 4 Aug 2017 9:57 am Operator: JH2
Sample : 1720267-11 Inst : GC-V1
Misc : 10 E RSK-175 25uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:07 2017 Quant Results File: RSK175.RES

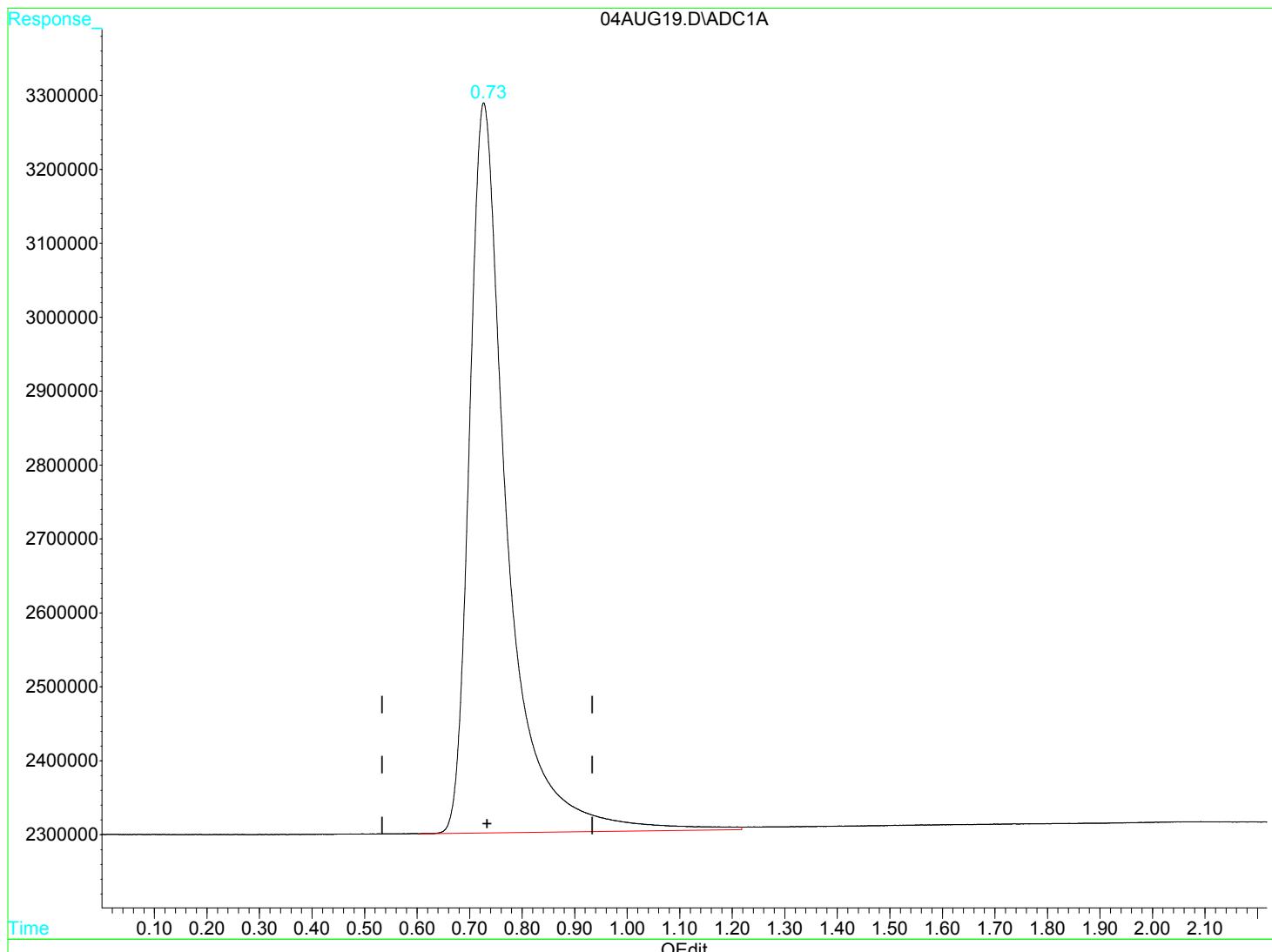
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG19.D Vial: 19
 Acq On : 4 Aug 2017 9:57 am Operator: JH2
 Sample : 1720267-11 Inst : GC-V1
 Misc : 10 E RSK-175 25uL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 10:00 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(1) Methane (m)

0.73min 81.369ug/L

response 49251862

(+) = Expected Retention Time

04AUG19.D RSK175.M Mon Aug 07 09:06:57 2017

MSD1

BC Laboratories, Inc, Page 55 of 925



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Calibration Standards

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN05.D Vial: 5
Acq On : 27 Jan 2017 7:56 am Operator: JH2
Sample : 1701454-CAL1 Inst : GC-V1
Misc : CAL 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:59 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Tue Jan 06 14:13:40 2015
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

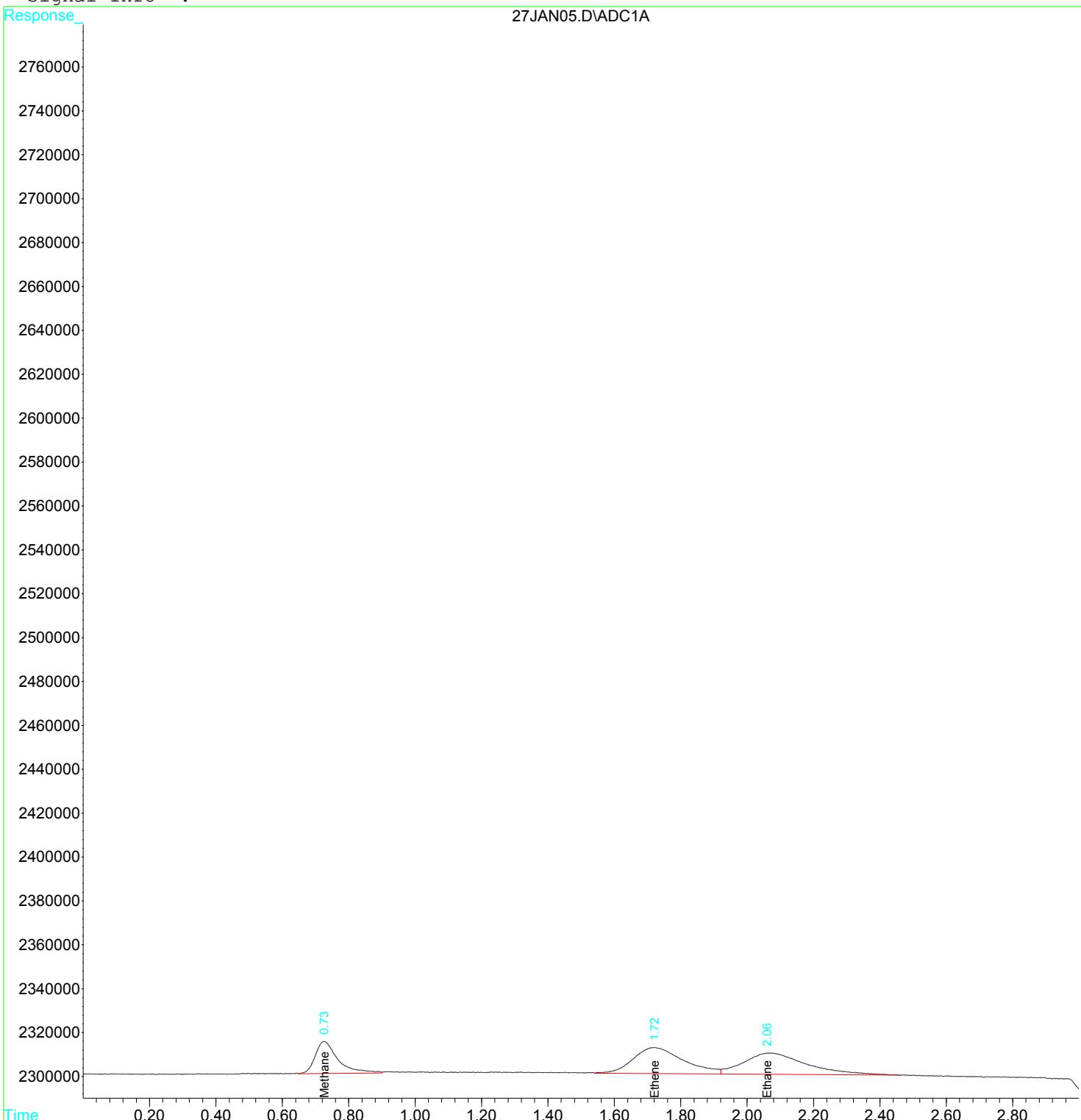
Compound	R.T.	Response	Conc Units
<hr/>			
Target Compounds			
1) m Methane	0.73	691757	1.1814 ug/L
2) m Ethene	1.72	1251437	3.2424 ug/L
3) m Ethane	2.07	1275089	2.2179 ug/L

Quantitation Report

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN05.D Vial: 5
Acq On : 27 Jan 2017 7:56 am Operator: JH2
Sample : 1701454-CAL1 Inst : GC-V1
Misc : CAL 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:59 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Tue Jan 06 14:13:40 2015
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

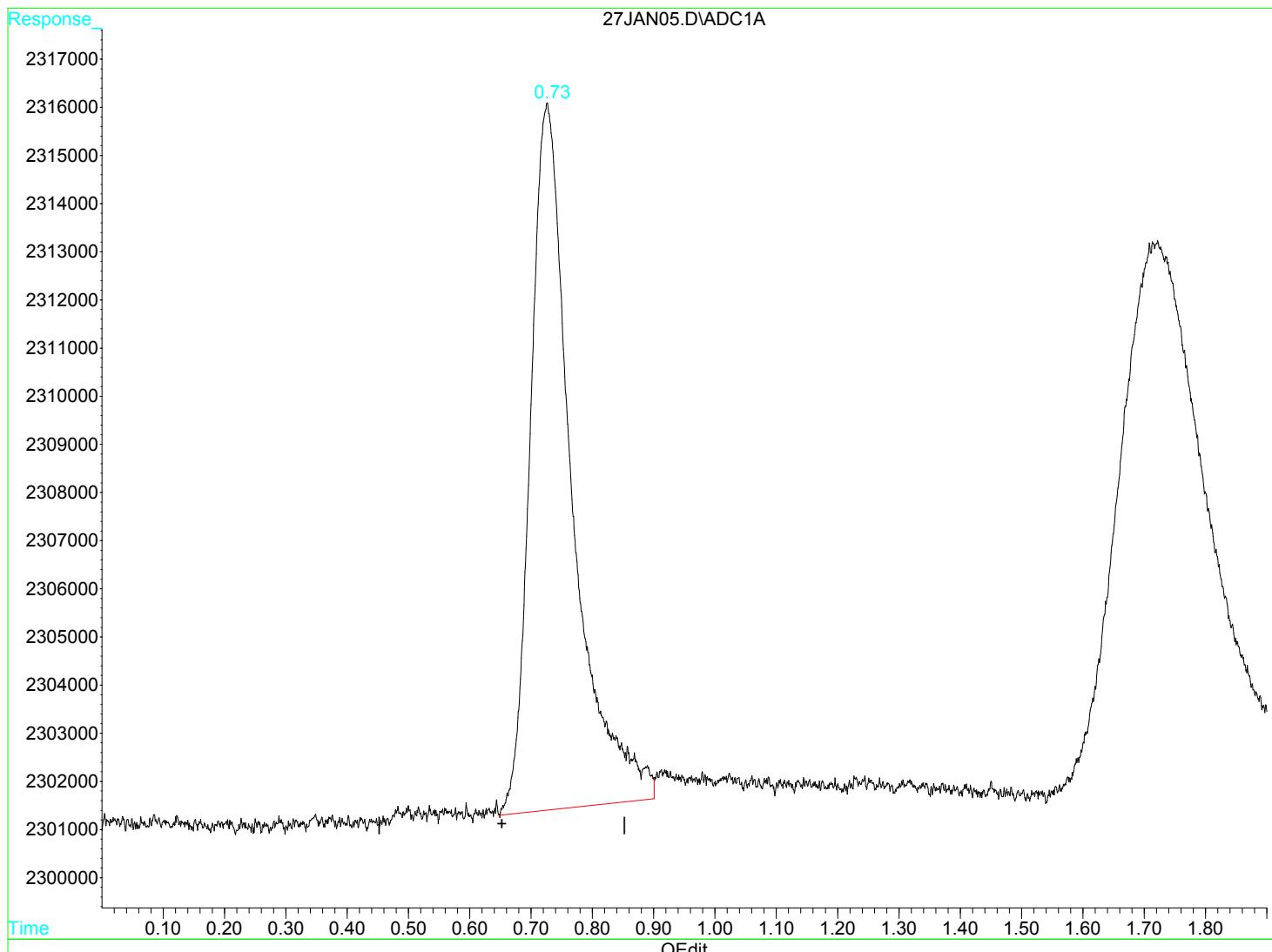
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN05.D Vial: 5
Acq On : 27 Jan 2017 7:56 am Operator: JH2
Sample : 1701454-CAL1 Inst : GC-V1
Misc : CAL 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:59 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(1) Methane (m)

0.73min 1.181ug/L

response 691757

(+) = Expected Retention Time

27JAN05.D RSK175.M Wed Feb 15 08:43:31 2017

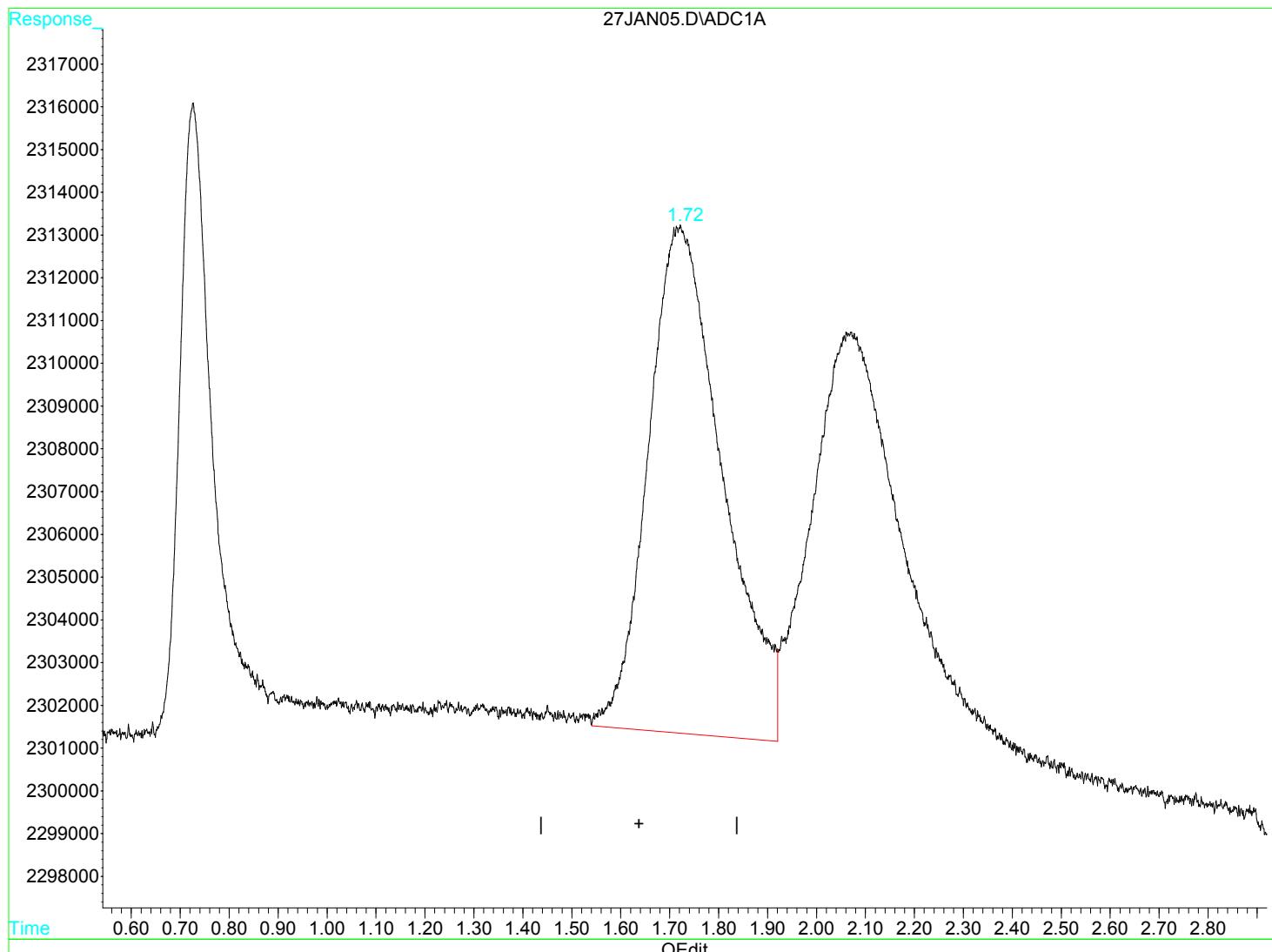
MSD1

BC Laboratories, Inc, Page 59 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN05.D Vial: 5
Acq On : 27 Jan 2017 7:56 am Operator: JH2
Sample : 1701454-CAL1 Inst : GC-V1
Misc : CAL 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:59 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(2) Ethene (m)

1.72min 3.242ug/L

response 1251437

(+) = Expected Retention Time

27JAN05.D RSK175.M Wed Feb 15 08:43:35 2017

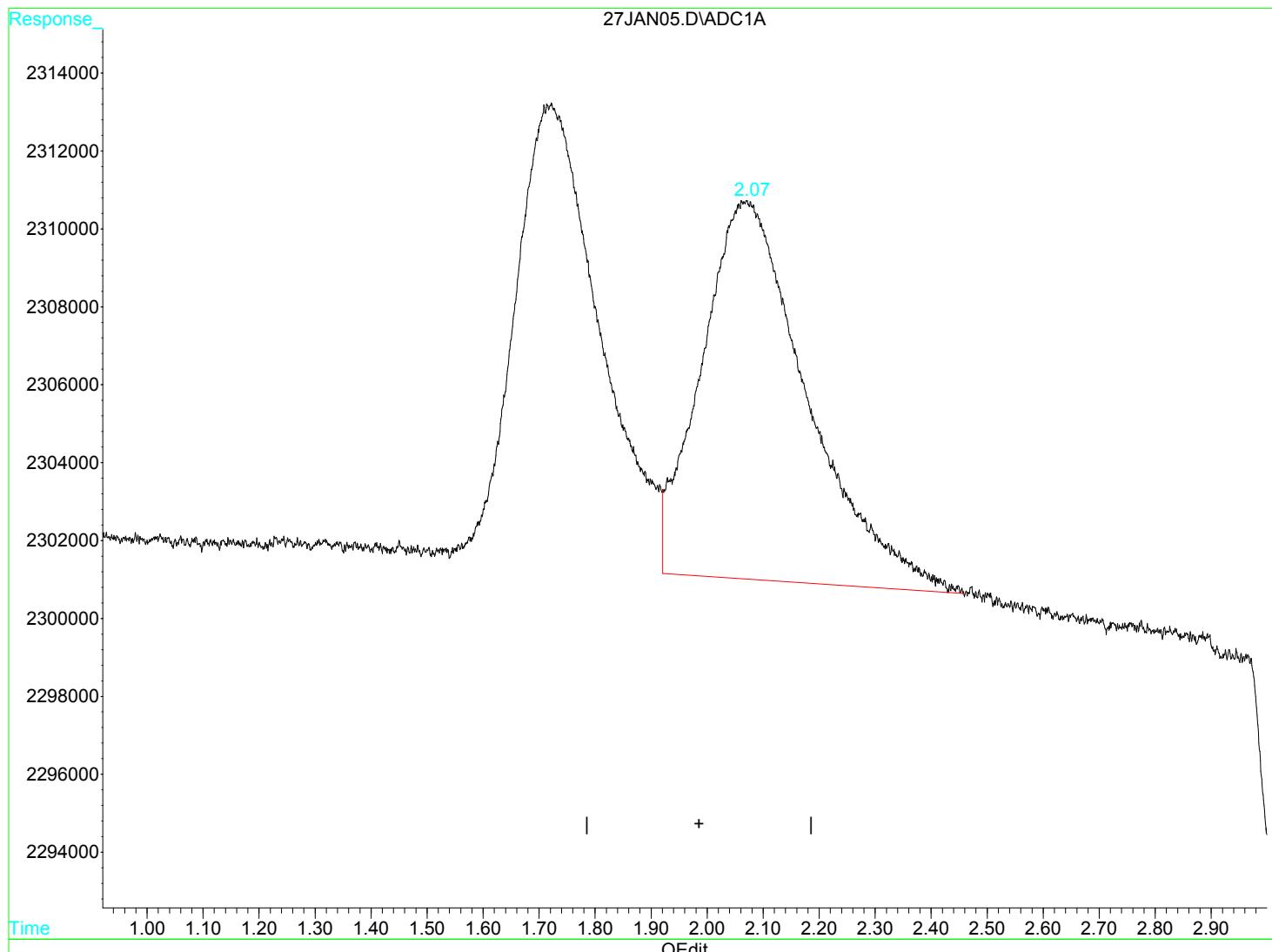
MSD1

BC Laboratories, Inc, Page 60 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN05.D Vial: 5
Acq On : 27 Jan 2017 7:56 am Operator: JH2
Sample : 1701454-CAL1 Inst : GC-V1
Misc : CAL 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:59 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(3) Ethane (m)

2.07min 2.218ug/L

response 1275089

(+) = Expected Retention Time

27JAN05.D RSK175.M Wed Feb 15 08:43:40 2017

MSD1

BC Laboratories, Inc, Page 61 of 925

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN04.D Vial: 4
Acq On : 27 Jan 2017 7:52 am Operator: JH2
Sample : 1701454-CAL2 Inst : GC-V1
Misc : CAL 2 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:55 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Tue Jan 06 14:13:40 2015
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

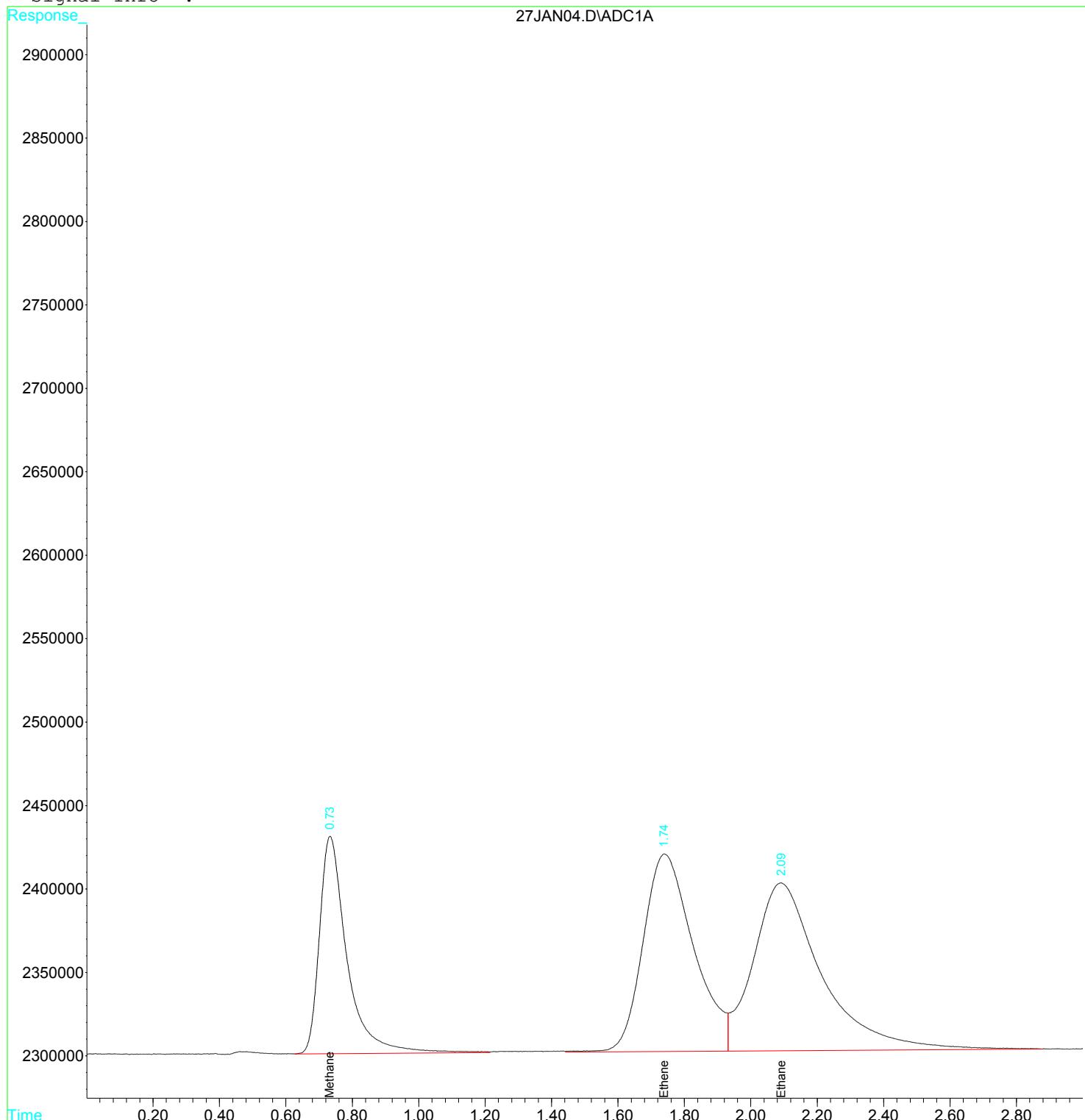
Compound	R.T.	Response	Conc Units
<hr/>			
Target Compounds			
1) m Methane	0.73	7510447	12.8269 ug/L
2) m Ethene	1.74f	12518403	32.4341 ug/L
3) m Ethane	2.09f	14383928	25.0192 ug/L

Quantitation Report

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN04.D Vial: 4
Acq On : 27 Jan 2017 7:52 am Operator: JH2
Sample : 1701454-CAL2 Inst : GC-V1
Misc : CAL 2 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:55 2017 Quant Results File: RSK175.RES

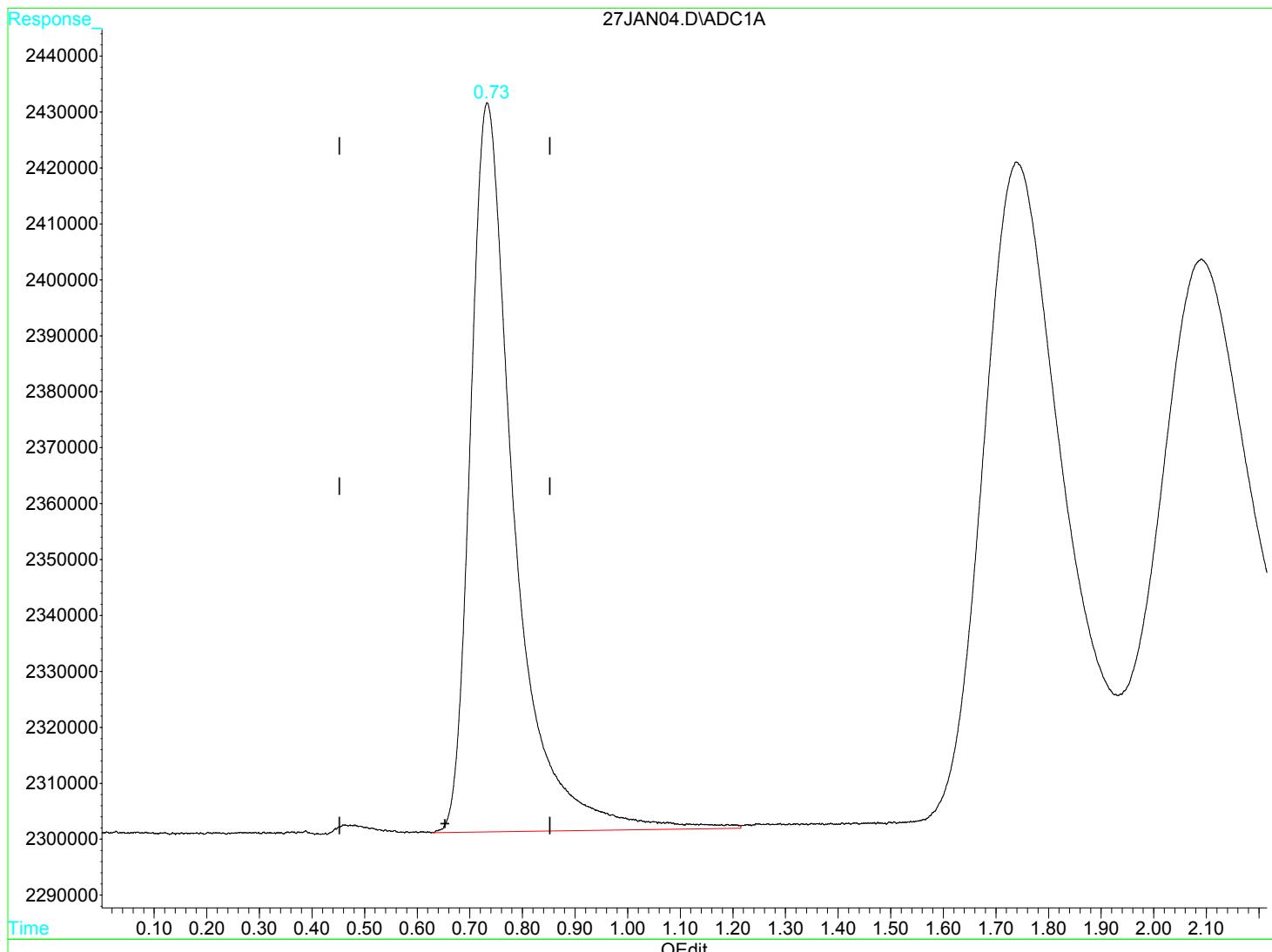
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Tue Jan 06 14:13:40 2015
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN04.D Vial: 4
 Acq On : 27 Jan 2017 7:52 am Operator: JH2
 Sample : 1701454-CAL2 Inst : GC-V1
 Misc : CAL 2 RSK-175 250UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Jan 27 7:55 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



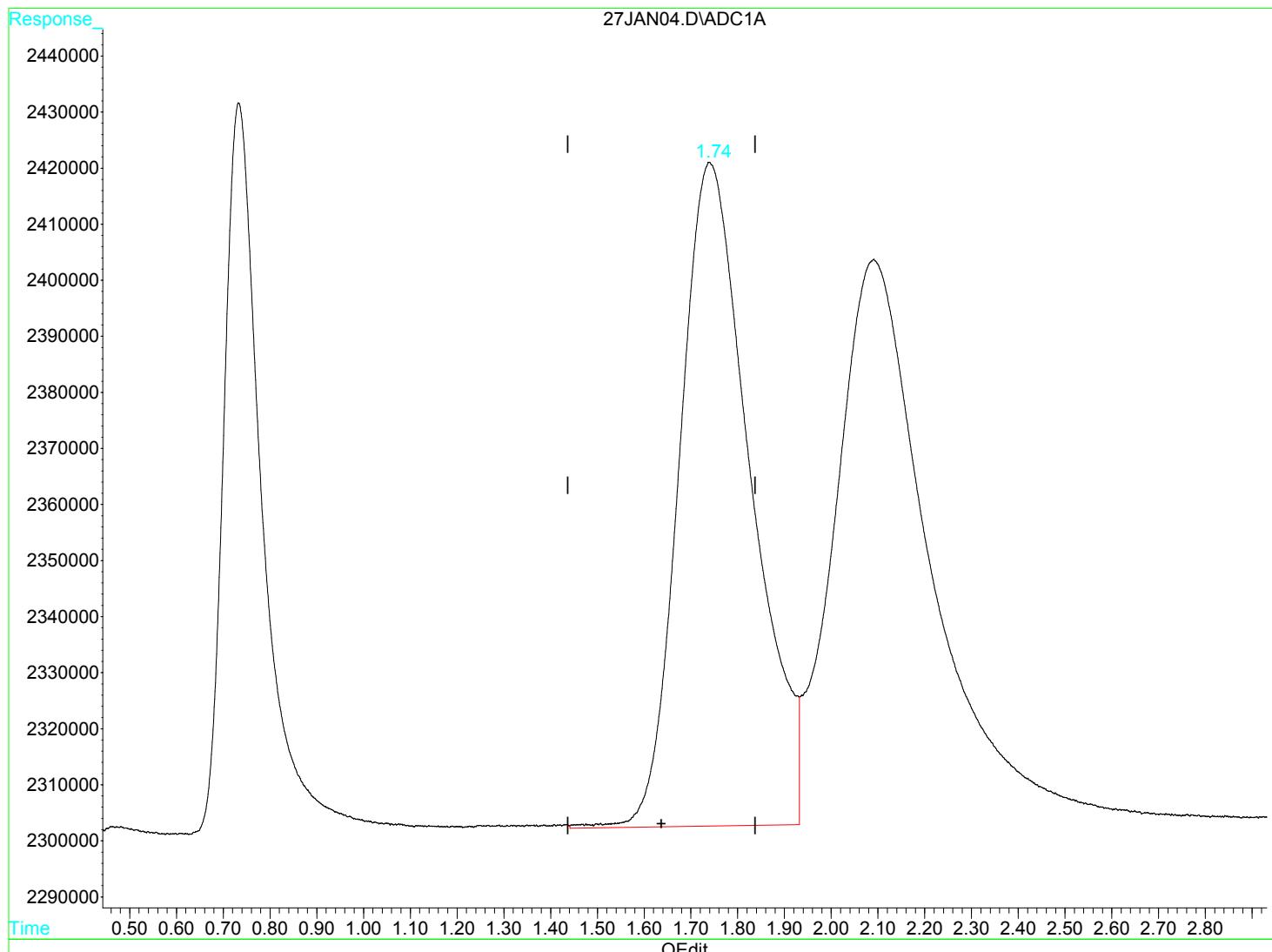
(1) Methane (m)

0.73min 12.827ug/L

response 7510447

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN04.D Vial: 4
 Acq On : 27 Jan 2017 7:52 am Operator: JH2
 Sample : 1701454-CAL2 Inst : GC-V1
 Misc : CAL 2 RSK-175 250UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Jan 27 7:55 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(2) Ethene (m)

1.74min 32.434ug/L

response 12518403

(+) = Expected Retention Time

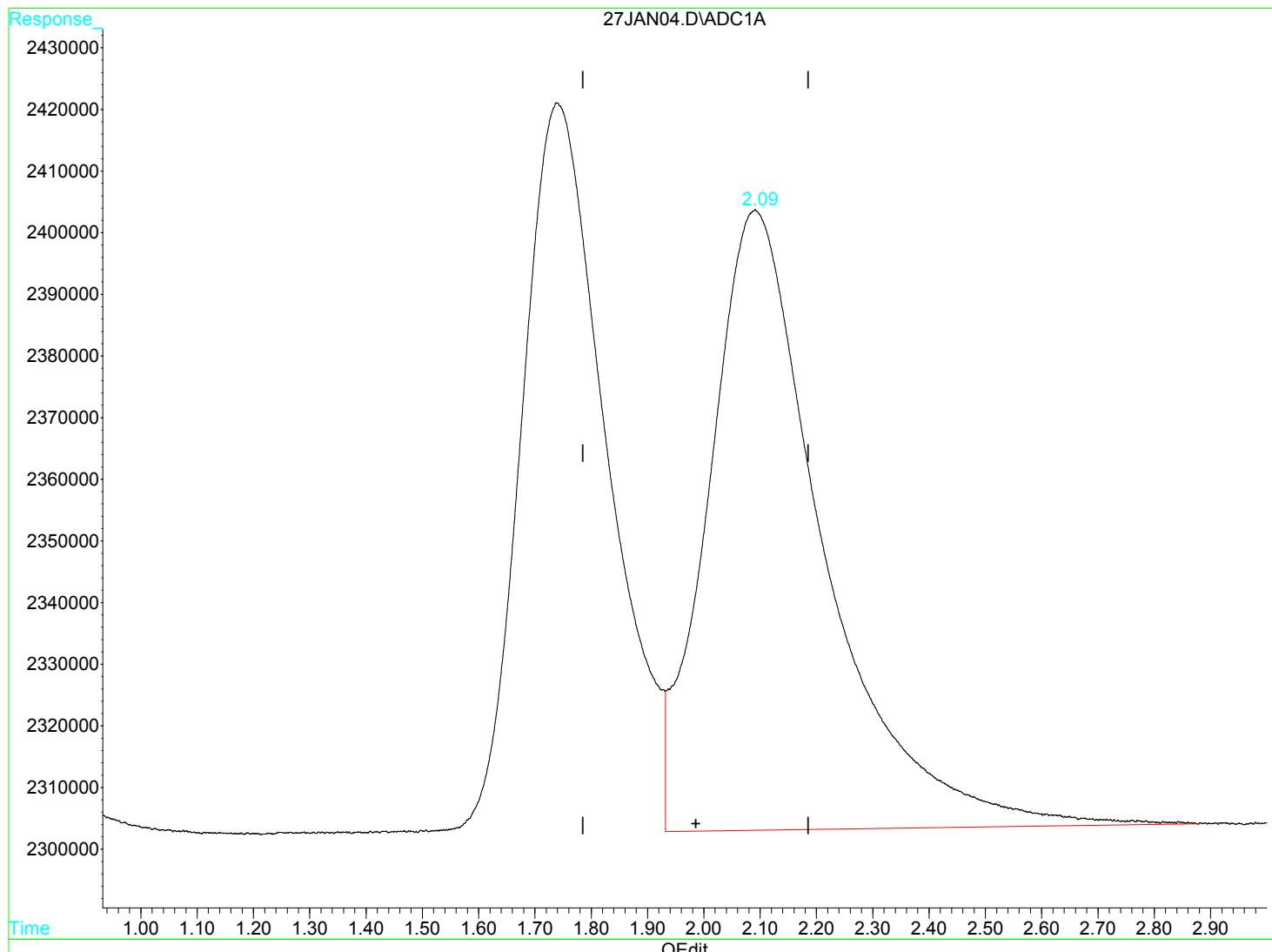
27JAN04.D RSK175.M Wed Feb 15 08:43:11 2017

MSD1

BC Laboratories, Inc, Page 65 of 925

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN04.D Vial: 4
 Acq On : 27 Jan 2017 7:52 am Operator: JH2
 Sample : 1701454-CAL2 Inst : GC-V1
 Misc : CAL 2 RSK-175 250UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Jan 27 7:55 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN03.D Vial: 3
Acq On : 27 Jan 2017 7:47 am Operator: JH2
Sample : 1701454-CAL3 Inst : GC-V1
Misc : CAL 3 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:50 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Tue Jan 06 14:13:40 2015
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

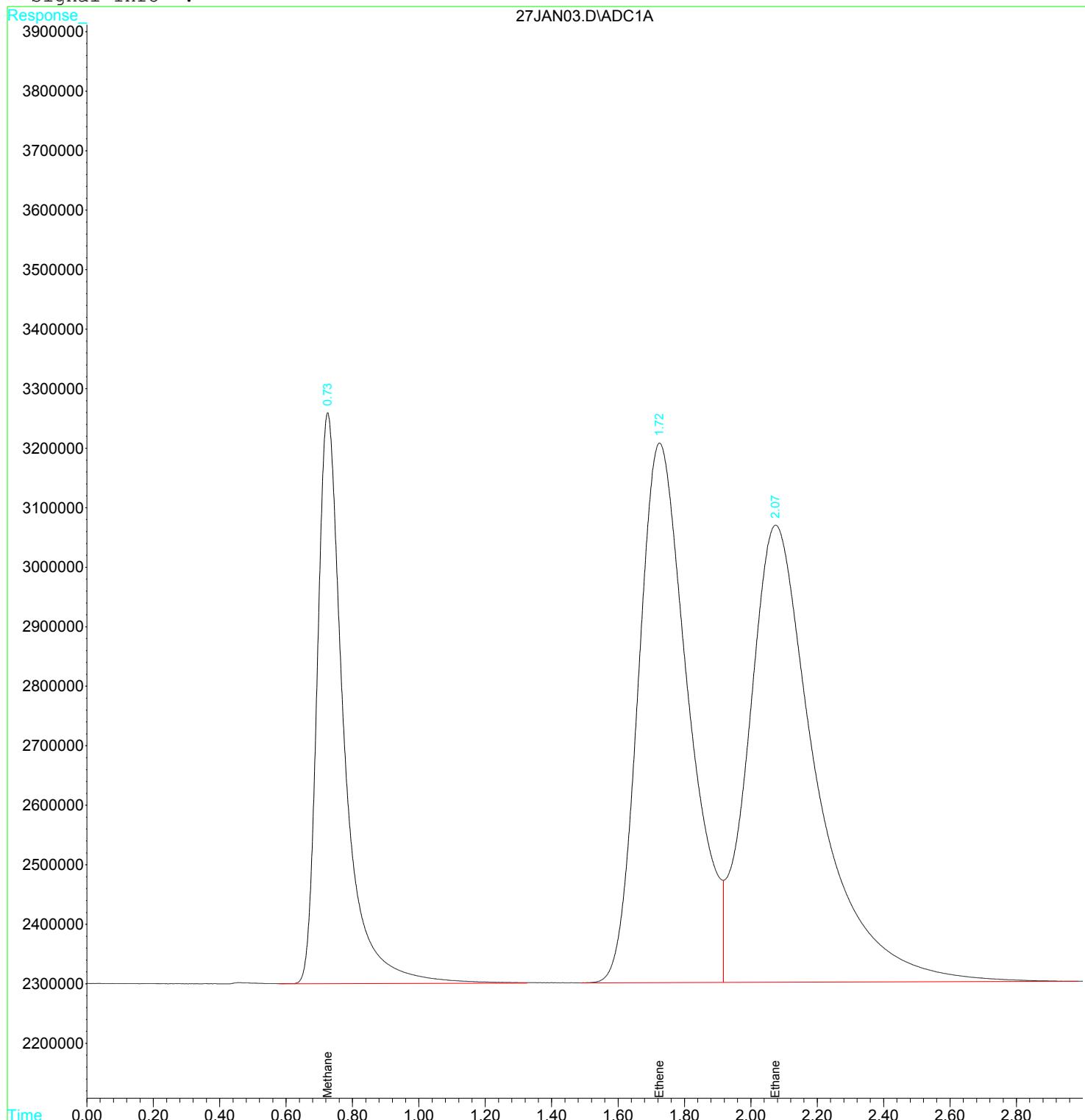
Compound	R.T.	Response	Conc	Units
<hr/>				
Target Compounds				
1) m Methane	0.73	53526843	91.4168	ug/L
2) m Ethene	1.73	94904572	245.8892	ug/L
3) m Ethane	2.08	108935077	189.4801	ug/L

Quantitation Report

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN03.D Vial: 3
Acq On : 27 Jan 2017 7:47 am Operator: JH2
Sample : 1701454-CAL3 Inst : GC-V1
Misc : CAL 3 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:50 2017 Quant Results File: RSK175.RES

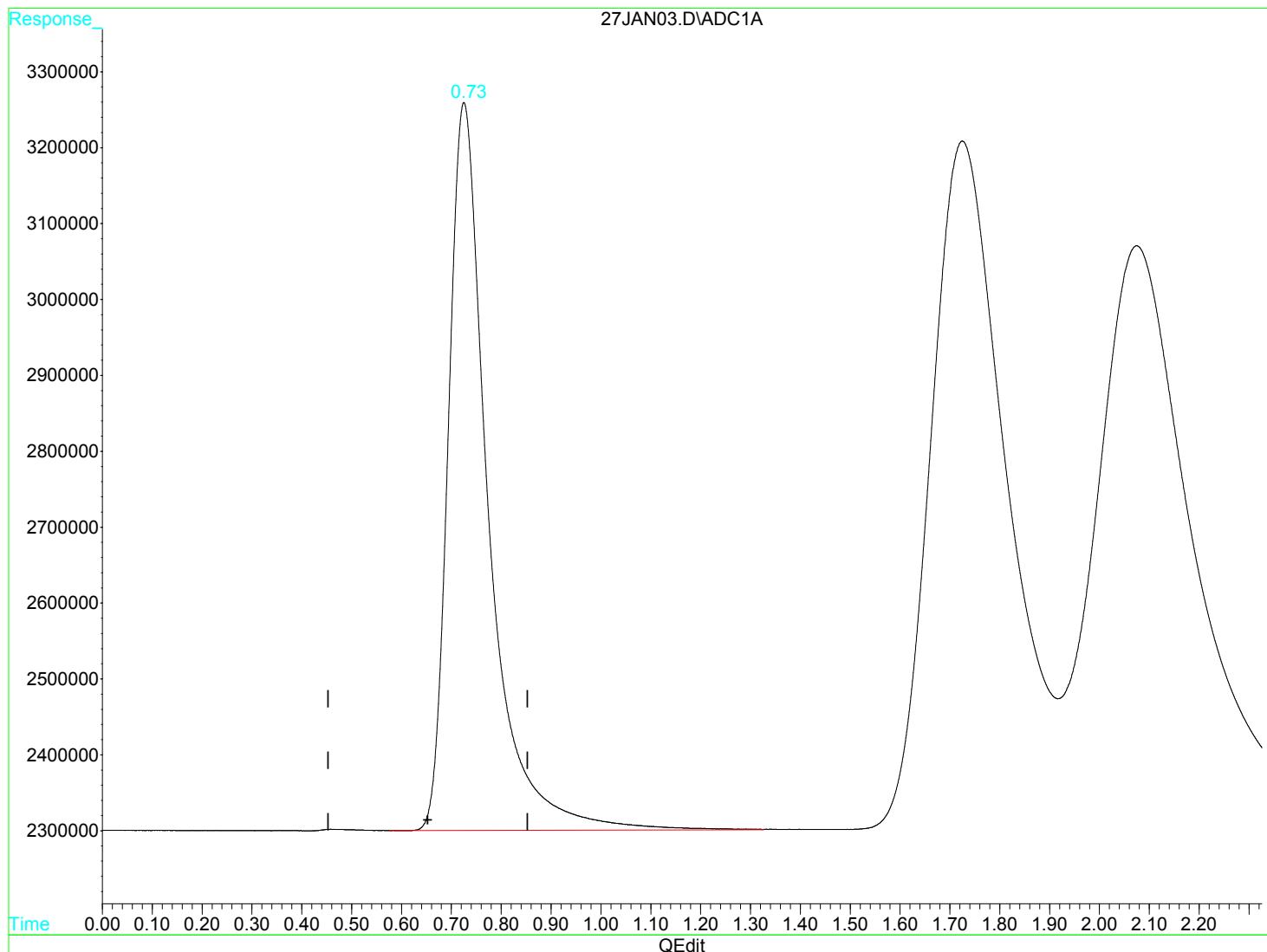
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Tue Jan 06 14:13:40 2015
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN03.D Vial: 3
 Acq On : 27 Jan 2017 7:47 am Operator: JH2
 Sample : 1701454-CAL3 Inst : GC-V1
 Misc : CAL 3 RSK-175 250UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Jan 27 7:50 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



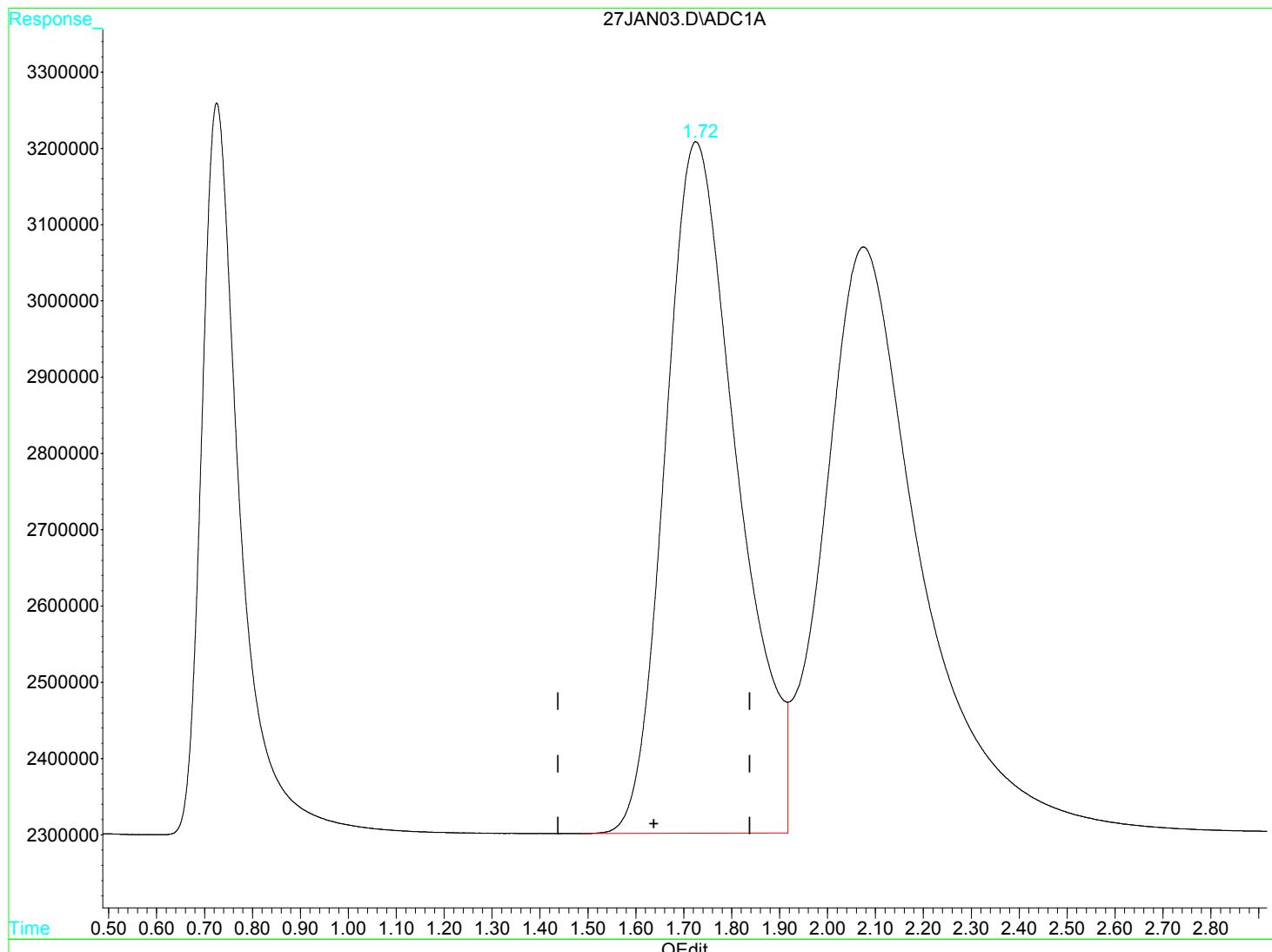
(1) Methane (m)

0.73min 91.417ug/L

response 53526843

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN03.D Vial: 3
 Acq On : 27 Jan 2017 7:47 am Operator: JH2
 Sample : 1701454-CAL3 Inst : GC-V1
 Misc : CAL 3 RSK-175 250UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Jan 27 7:50 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(2) Ethene (m)

1.73min 245.889ug/L

response 94904572

(+) = Expected Retention Time

27JAN03.D RSK175.M Wed Feb 15 08:42:34 2017

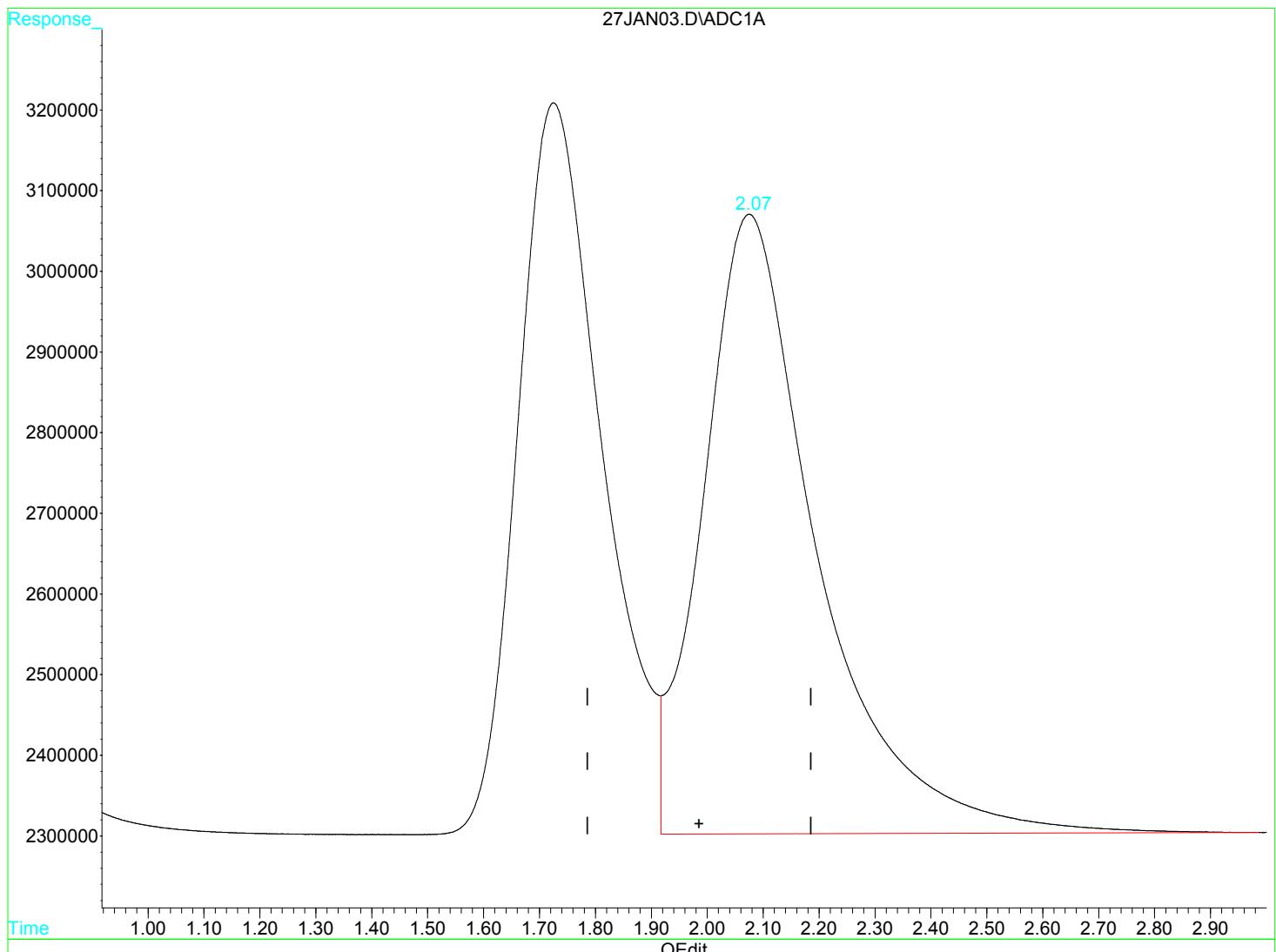
MSD1

BC Laboratories, Inc, Page 70 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN03.D Vial: 3
Acq On : 27 Jan 2017 7:47 am Operator: JH2
Sample : 1701454-CAL3 Inst : GC-V1
Misc : CAL 3 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:50 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(3) Ethane (m)

2.08min 189.480ug/L

response 108935077

(+) = Expected Retention Time

27JAN03.D RSK175.M Wed Feb 15 08:42:38 2017

MSD1

BC Laboratories, Inc, Page 71 of 925

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN02.D Vial: 2
Acq On : 27 Jan 2017 7:43 am Operator: JH2
Sample : 1701454-CAL4 Inst : GC-V1
Misc : CAL 4 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:46 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Tue Jan 06 14:13:40 2015
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

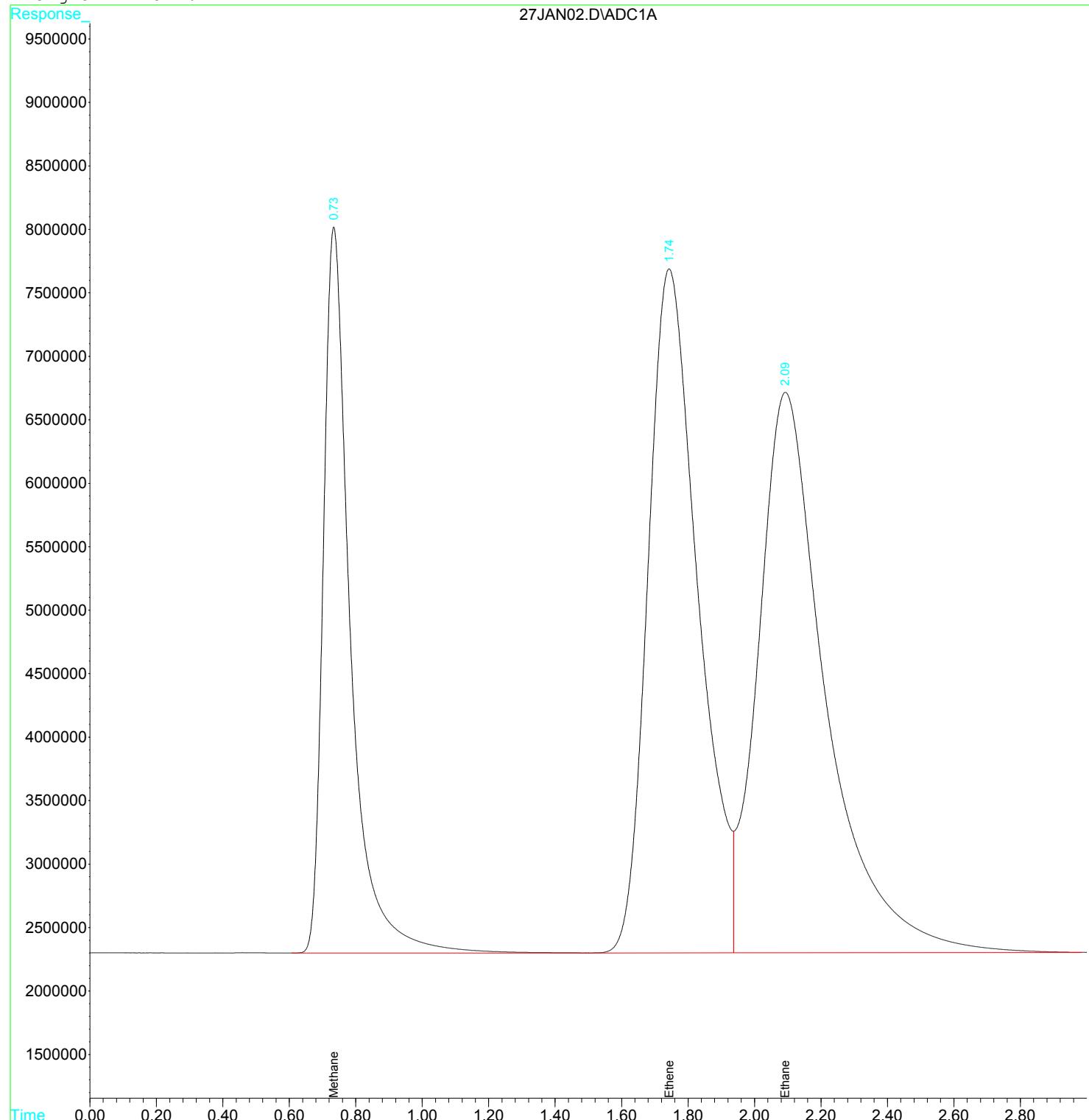
Compound	R.T.	Response	Conc	Units
<hr/>				
Target Compounds				
1) m Methane	0.73	323602300	552.6703	ug/L
2) m Ethene	1.74f	563612878	1460.2703	ug/L
3) m Ethane	2.09f	624041169	1085.4482	ug/L

Quantitation Report

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN02.D Vial: 2
Acq On : 27 Jan 2017 7:43 am Operator: JH2
Sample : 1701454-CAL4 Inst : GC-V1
Misc : CAL 4 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:46 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Tue Jan 06 14:13:40 2015
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

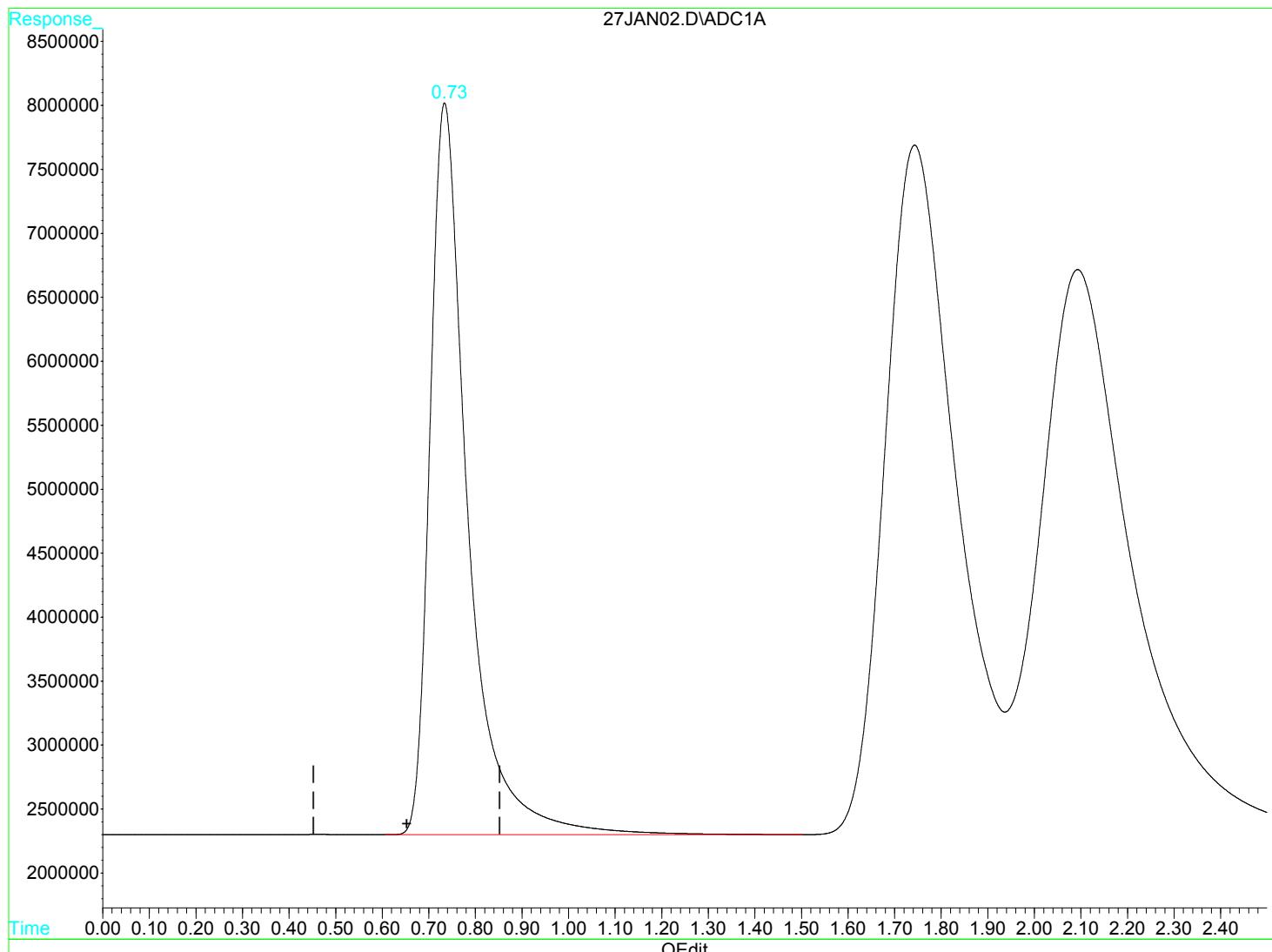
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN02.D Vial: 2
Acq On : 27 Jan 2017 7:43 am Operator: JH2
Sample : 1701454-CAL4 Inst : GC-V1
Misc : CAL 4 RSK-175 250UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jan 27 7:46 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(1) Methane (m)

0.73min 552.670ug/L

response 323602300

(+) = Expected Retention Time

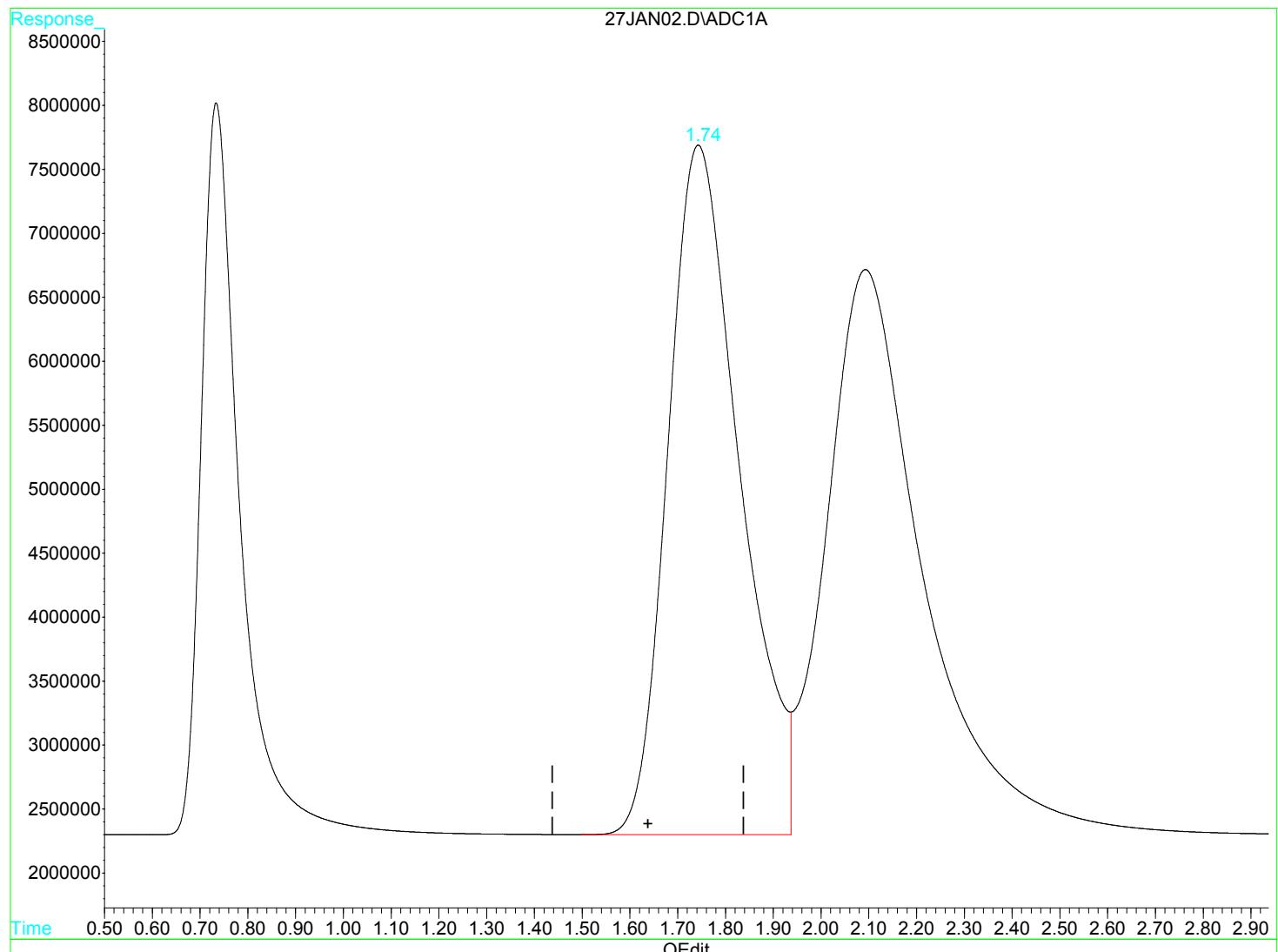
27JAN02.D RSK175.M Wed Feb 15 08:42:06 2017

MSD1

BC Laboratories, Inc, Page 74 of 925

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN02.D Vial: 2
 Acq On : 27 Jan 2017 7:43 am Operator: JH2
 Sample : 1701454-CAL4 Inst : GC-V1
 Misc : CAL 4 RSK-175 250UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Jan 27 7:46 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(2) Ethene (m)

1.74min 1460.270ug/L

response 563612878

(+) = Expected Retention Time

27JAN02.D RSK175.M Wed Feb 15 08:42:14 2017

MSD1

BC Laboratories, Inc, Page 75 of 925



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Raw Data - ICV

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN06.D Vial: 6
Acq On : 27 Jan 2017 8:40 am Operator: JH2
Sample : 1701454-ICV1 Inst : GC-V1
Misc : ICV 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 7 10:20 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

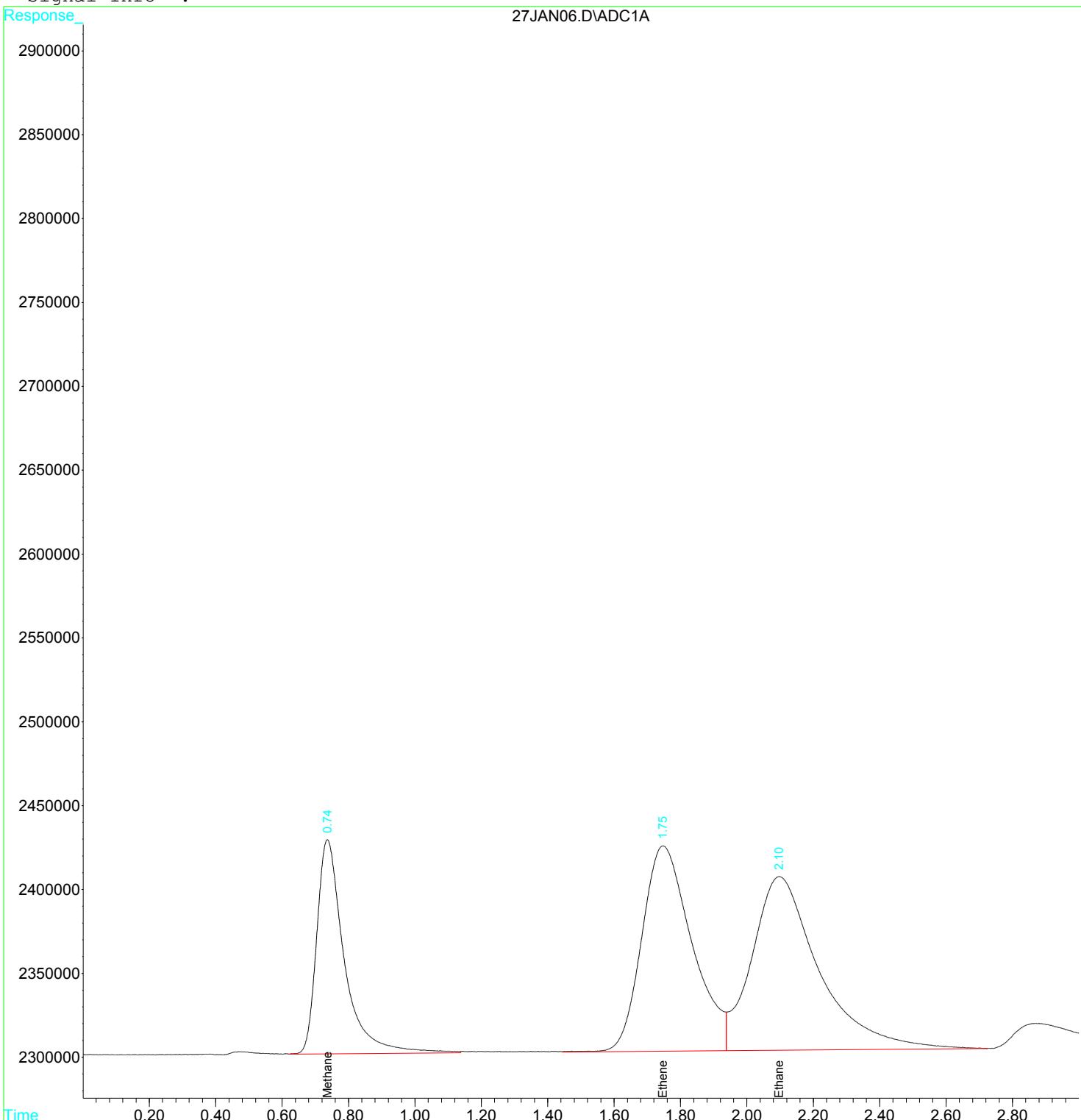
Compound	R.T.	Response	Conc	Units
<hr/>				
Target Compounds				
1) m Methane	0.74	7368524	12.1735	ug/L
2) m Ethene	1.75	12806794	31.8199	ug/L
3) m Ethane	2.10	14497414	24.9563	ug/L

Quantitation Report

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN06.D Vial: 6
Acq On : 27 Jan 2017 8:40 am Operator: JH2
Sample : 1701454-ICV1 Inst : GC-V1
Misc : ICV 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 7 10:20 2017 Quant Results File: RSK175.RES

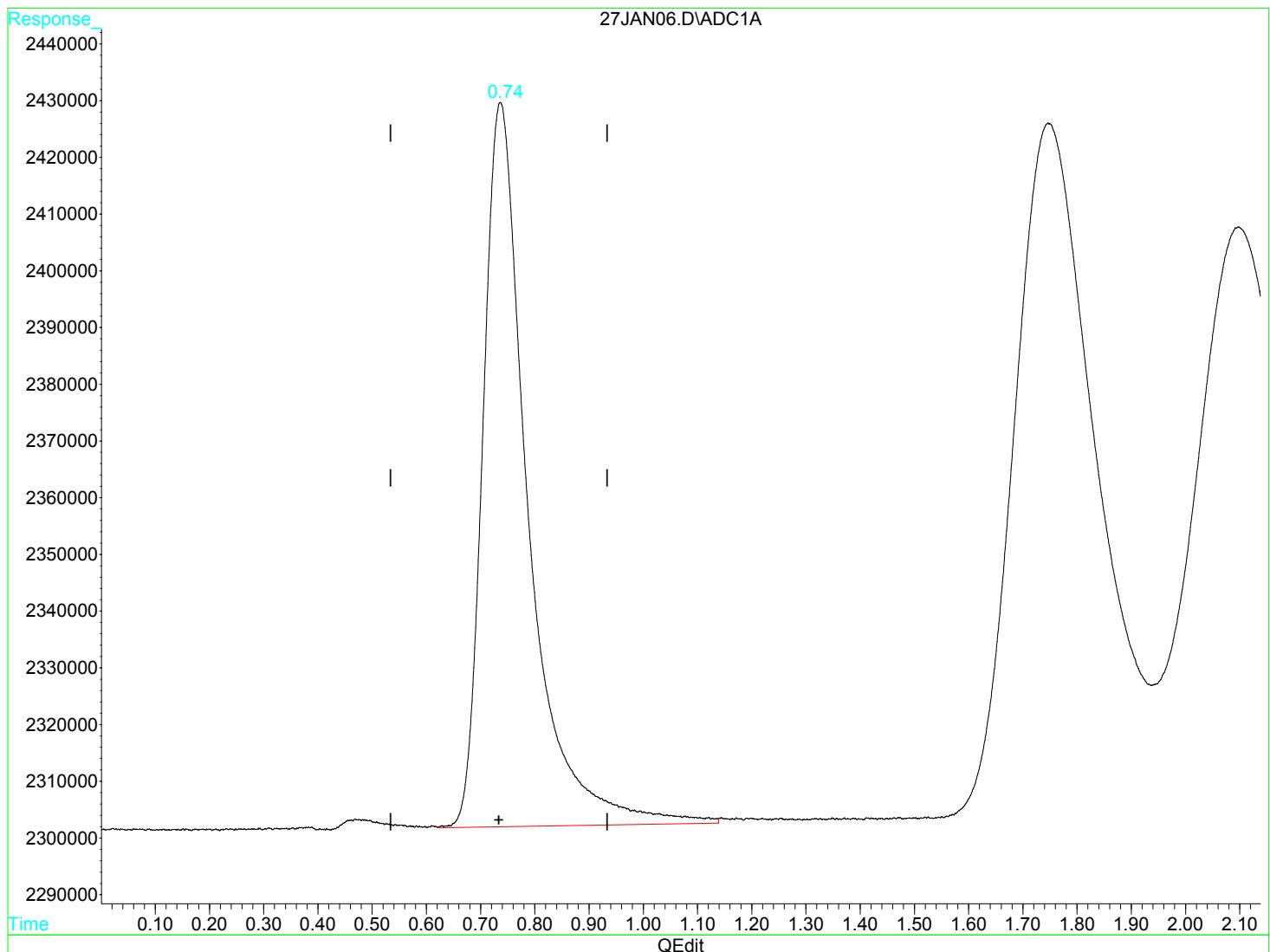
Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



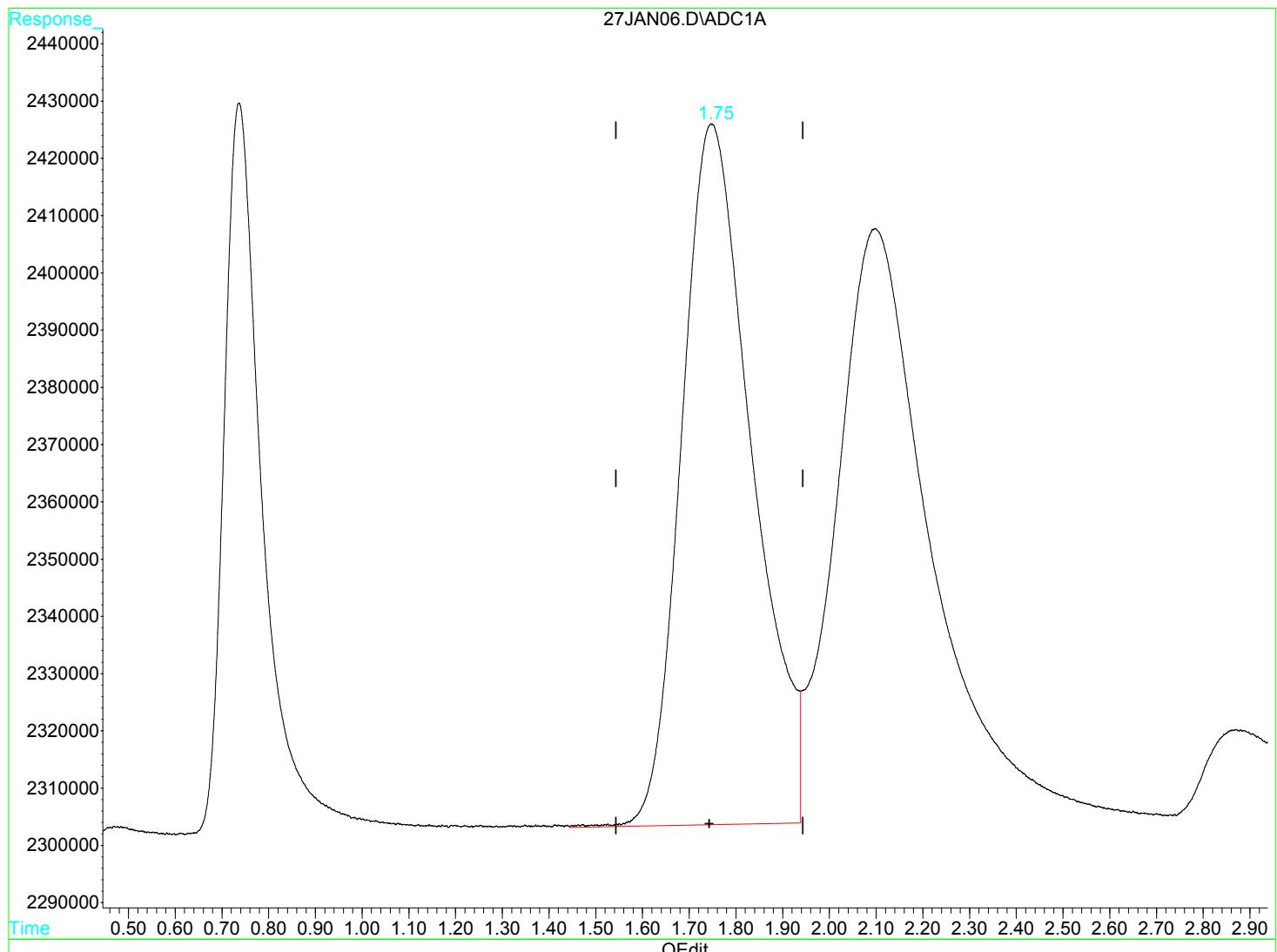
Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN06.D Vial: 6
 Acq On : 27 Jan 2017 8:40 am Operator: JH2
 Sample : 1701454-ICV1 Inst : GC-V1
 Misc : ICV 1 RSK-175 25UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Feb 7 10:20 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN06.D Vial: 6
 Acq On : 27 Jan 2017 8:40 am Operator: JH2
 Sample : 1701454-ICV1 Inst : GC-V1
 Misc : ICV 1 RSK-175 25UL Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Feb 7 10:20 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(2) Ethene (m)

1.75min 31.820ug/L

response 12806794

(+) = Expected Retention Time

27JAN06.D RSK175.M Tue Feb 07 10:21:10 2017

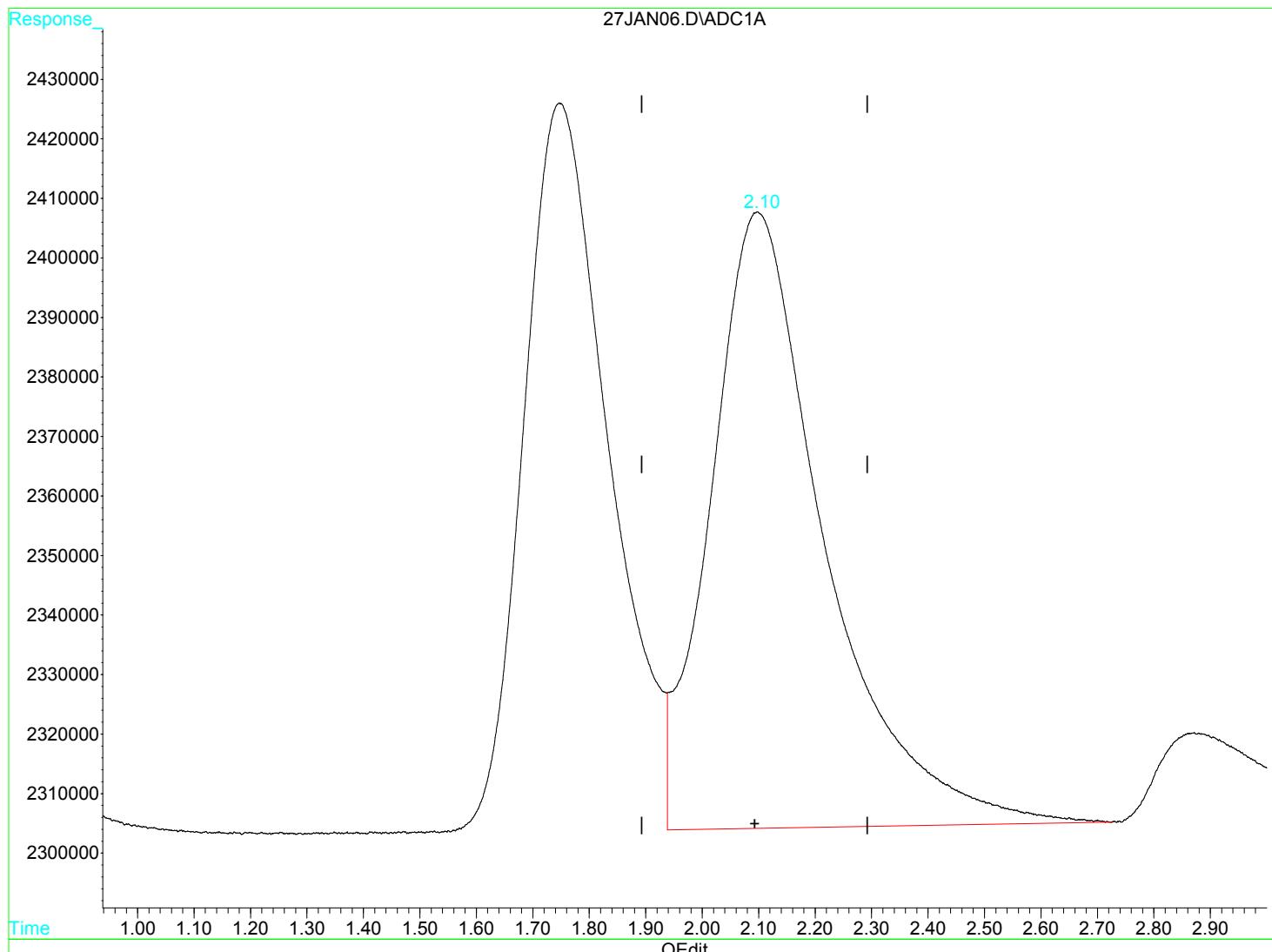
MSD1

BC Laboratories, Inc, Page 80 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN06.D Vial: 6
Acq On : 27 Jan 2017 8:40 am Operator: JH2
Sample : 1701454-ICV1 Inst : GC-V1
Misc : ICV 1 RSK-175 25UL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 7 10:20 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(3) Ethane (m)

2.10min 24.956ug/L

response 14497414



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - ICB

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN07.D Vial: 7
Acq On : 27 Jan 2017 8:45 am Operator: JH2
Sample : 1701454-ICB1 Inst : GC-V1
Misc : 1 He 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 7 10:21 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units
----------	------	----------	------	-------

Target Compounds

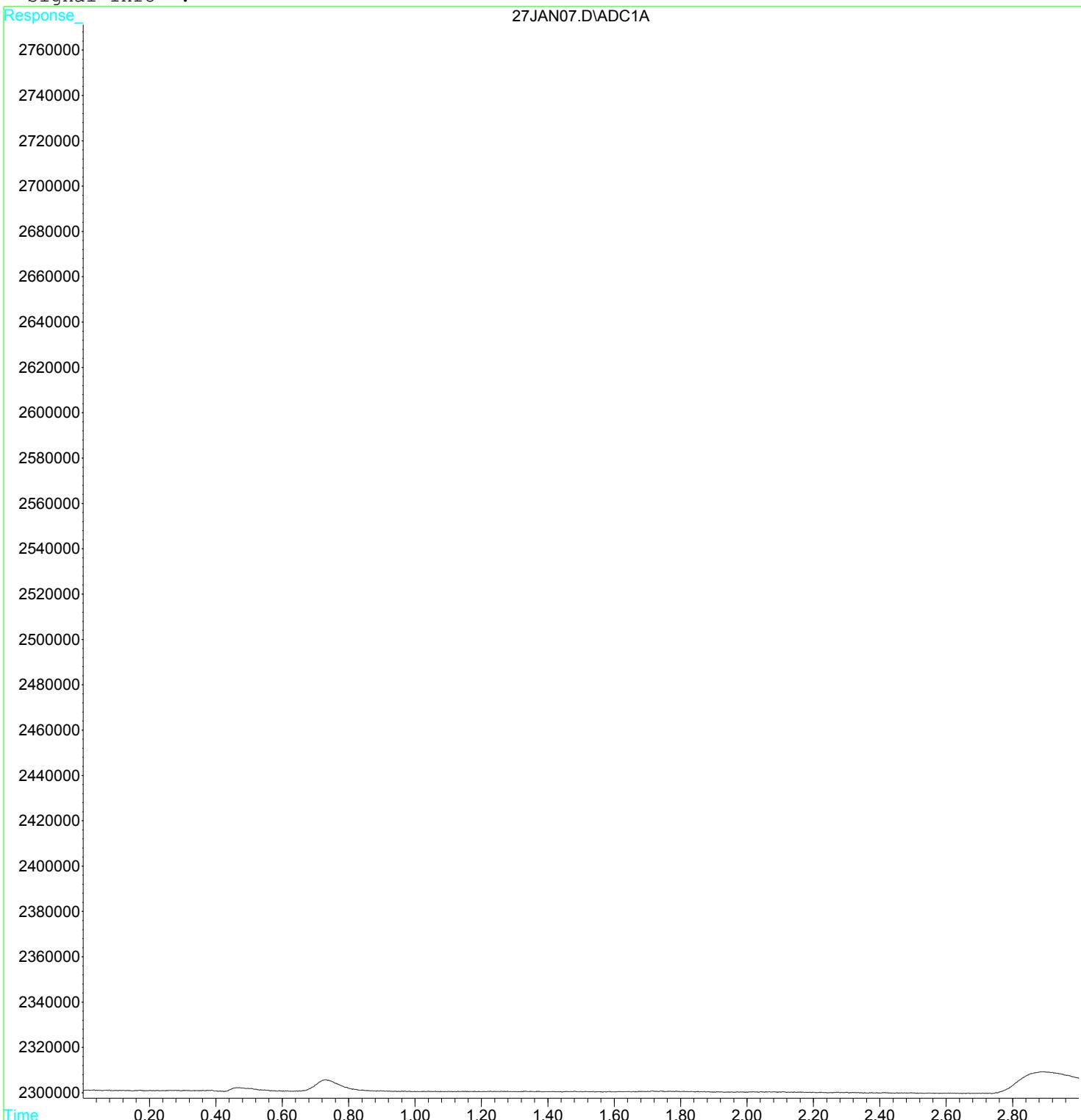
1) m	Methane	0.00	0	N.D.	ug/L d
2) m	Ethene	0.00	0	N.D.	ug/L
3) m	Ethane	0.00	0	N.D.	ug/L

Quantitation Report

Data File : D:\GC-V1\2017\JAN2017\JAN27\27JAN07.D Vial: 7
Acq On : 27 Jan 2017 8:45 am Operator: JH2
Sample : 1701454-ICB1 Inst : GC-V1
Misc : 1 He 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Feb 7 10:21 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :





Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - CCV

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG02.D Vial: 2
Acq On : 4 Aug 2017 6:36 am Operator: JH2
Sample : 1713774-CCV1 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 8:54 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

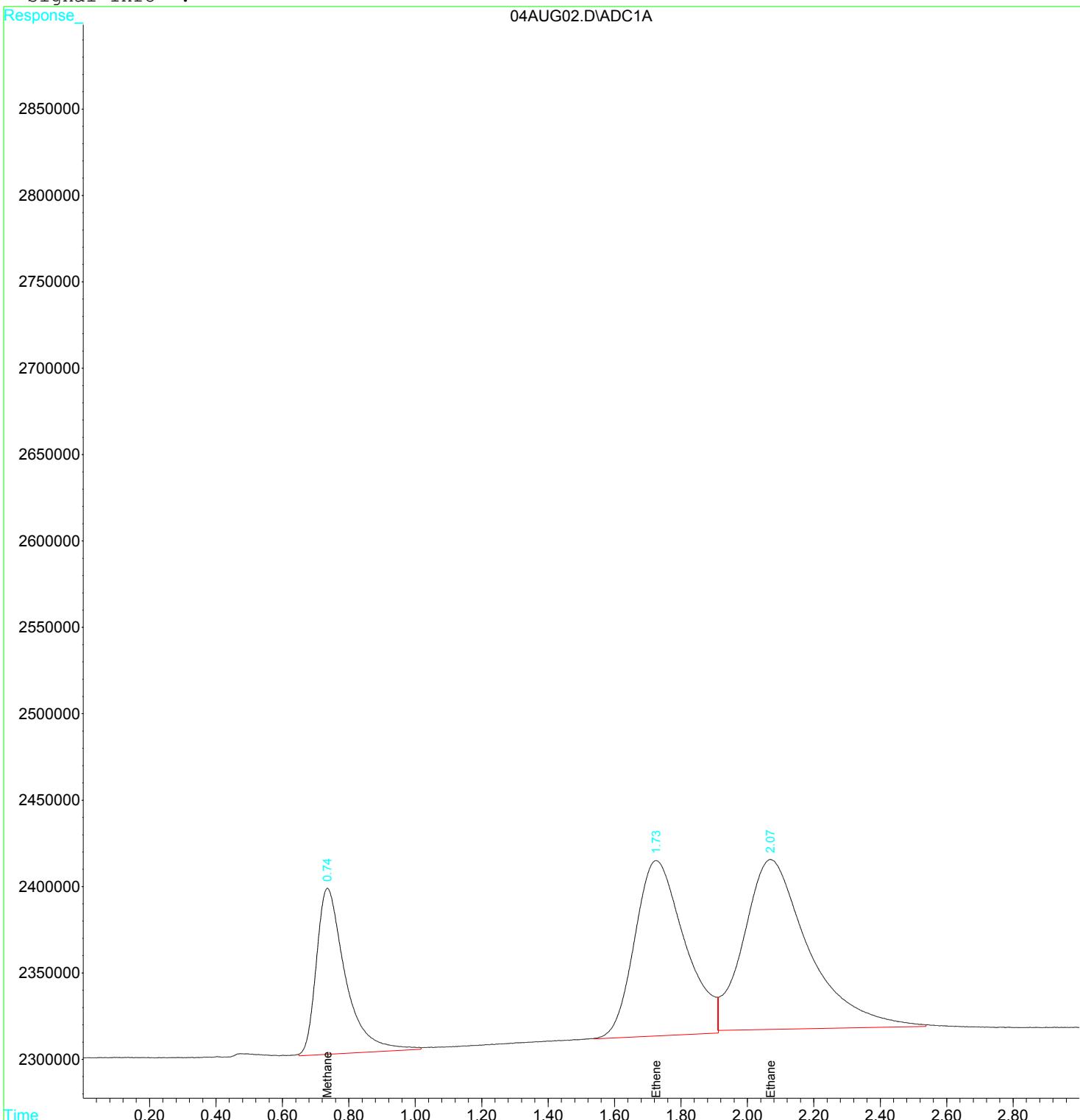
Compound	R.T.	Response	Conc	Units
<hr/>				
Target Compounds				
1) m Methane	0.74	5829801	9.6314	ug/L m
2) m Ethene	1.73	10645124	26.4490	ug/L m
3) m Ethane	2.07	13361975	23.0017	ug/L m

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG02.D Vial: 2
Acq On : 4 Aug 2017 6:36 am Operator: JH2
Sample : 1713774-CCV1 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 8:54 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

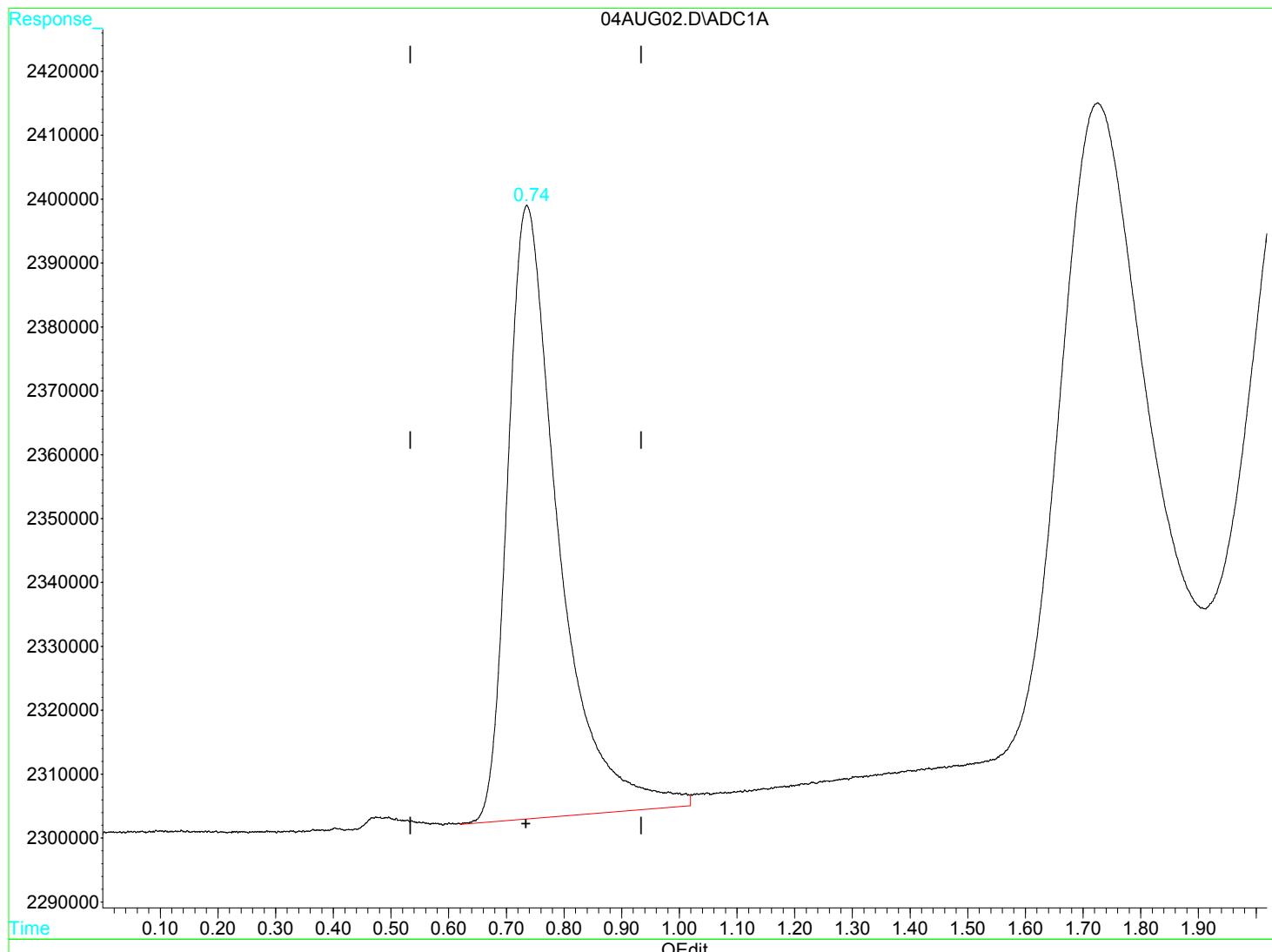
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG02.D Vial: 2
Acq On : 4 Aug 2017 6:36 am Operator: JH2
Sample : 1713774-CCV1 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 6:52 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(1) Methane (m)

0.74min 9.709ug/L

response 5876773

(+) = Expected Retention Time

04AUG02.D RSK175.M Mon Aug 07 08:53:07 2017

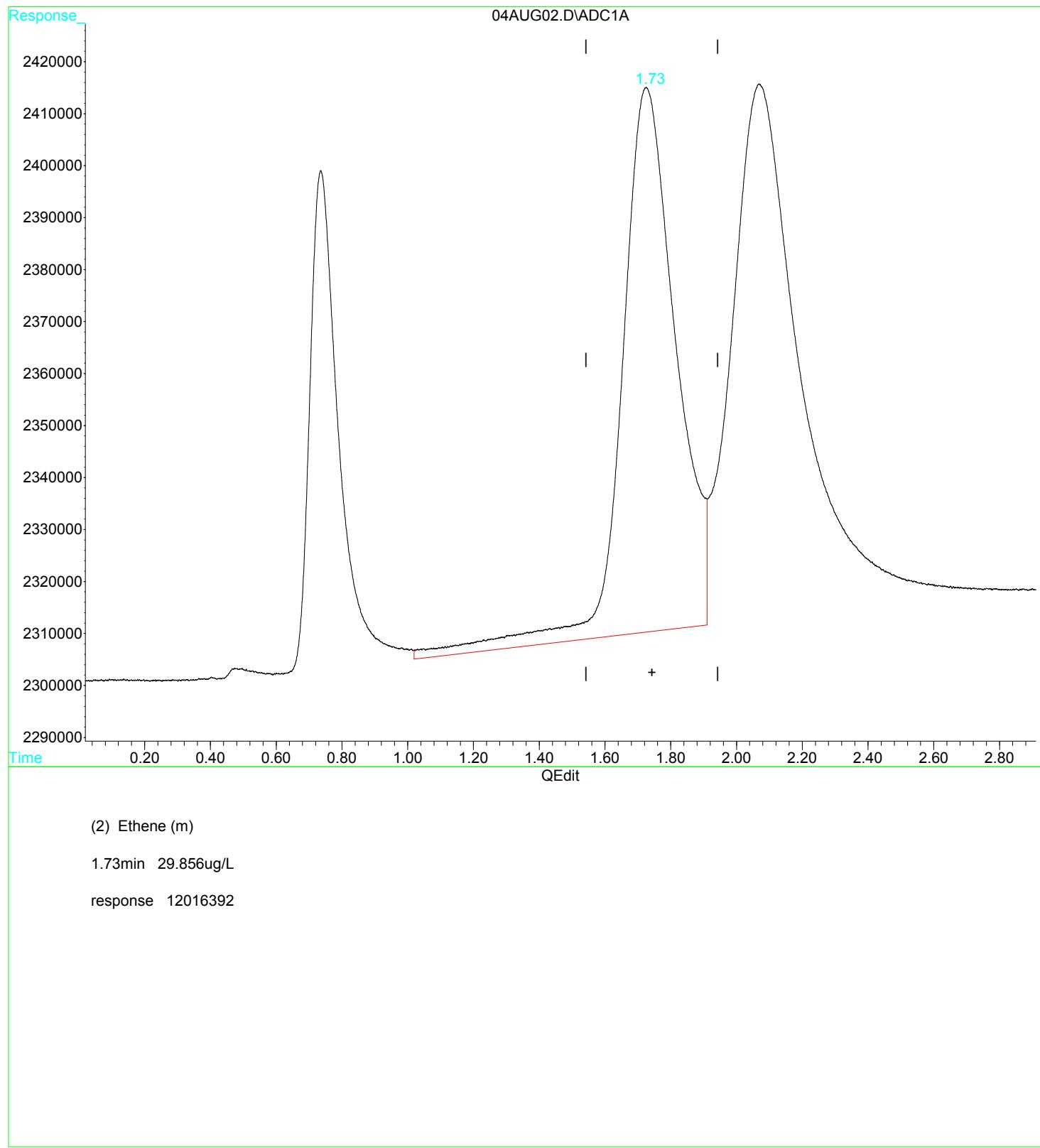
MSD1

BC Laboratories, Inc, Page 88 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG02.D Vial: 2
Acq On : 4 Aug 2017 6:36 am Operator: JH2
Sample : 1713774-CCV1 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 6:52 2017 Quant Results File: RSK175.RES

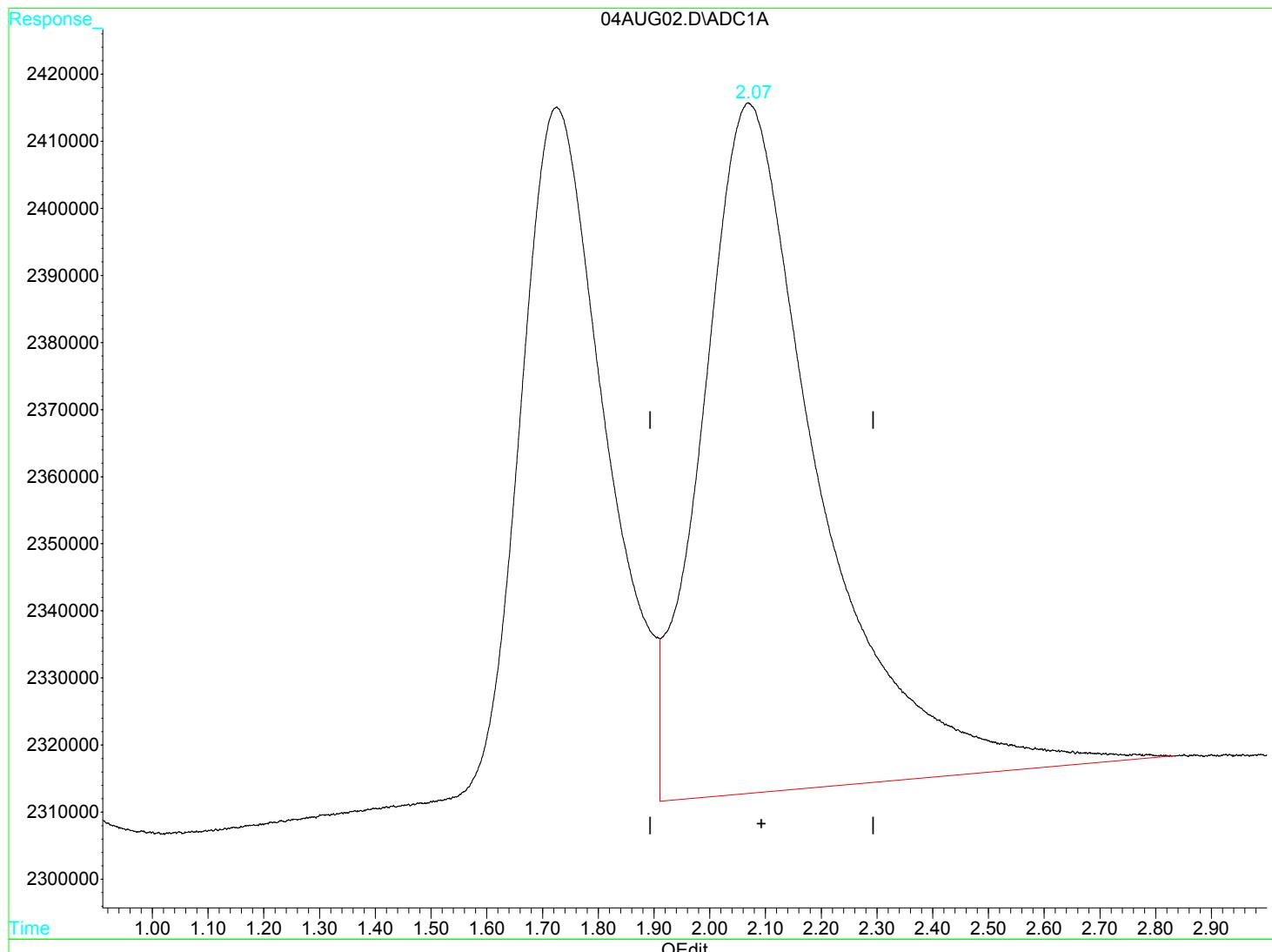
Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG02.D Vial: 2
Acq On : 4 Aug 2017 6:36 am Operator: JH2
Sample : 1713774-CCV1 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 6:52 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(3) Ethane (m)

2.07min 26.048ug/L

response 15131671

(+) = Expected Retention Time

04AUG02.D RSK175.M Mon Aug 07 08:54:32 2017

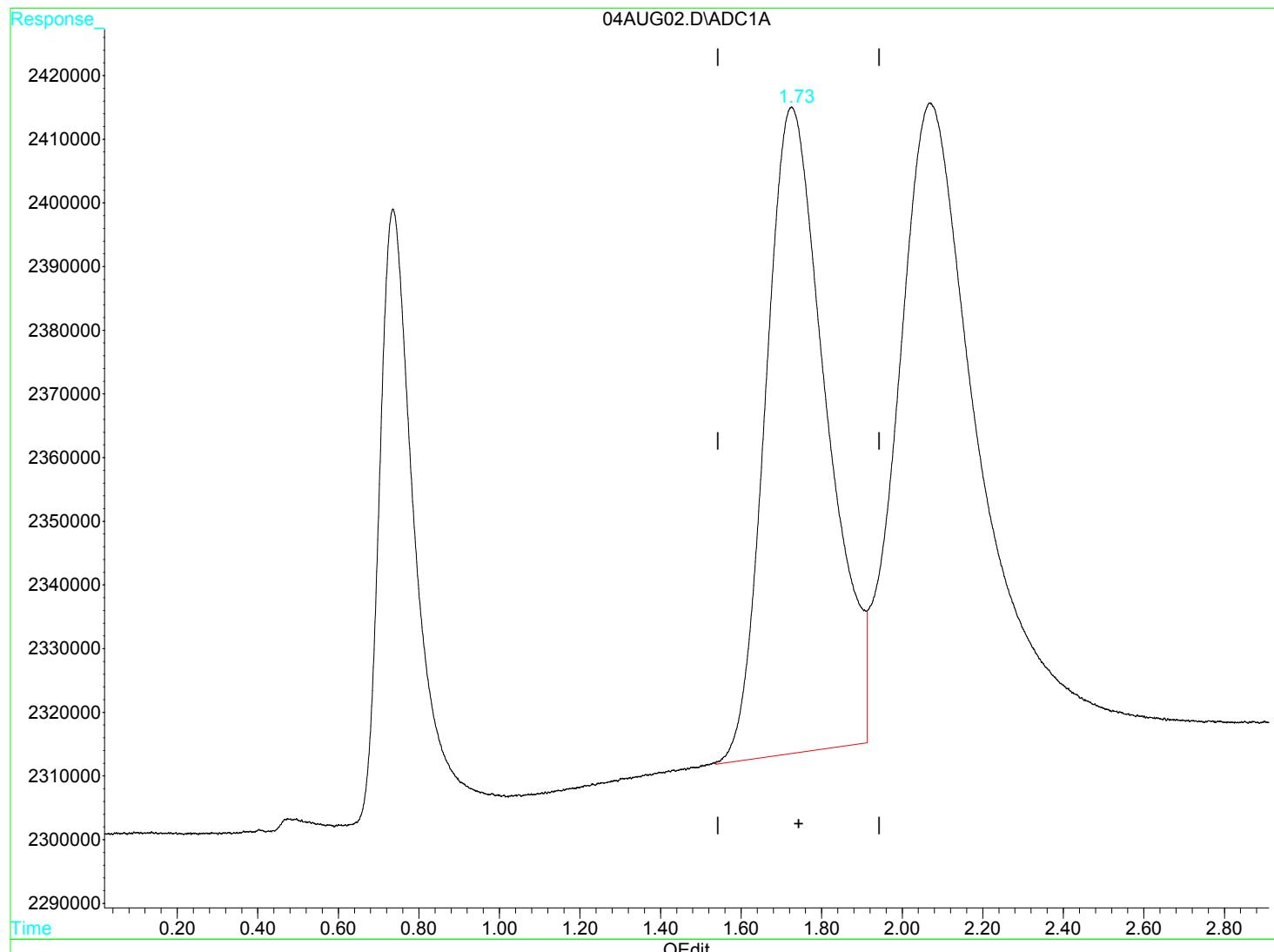
MSD1

BC Laboratories, Inc, Page 90 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG02.D Vial: 2
Acq On : 4 Aug 2017 6:36 am Operator: JH2
Sample : 1713774-CCV1 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 6:52 2017 Quant Results File: RSK175.RES

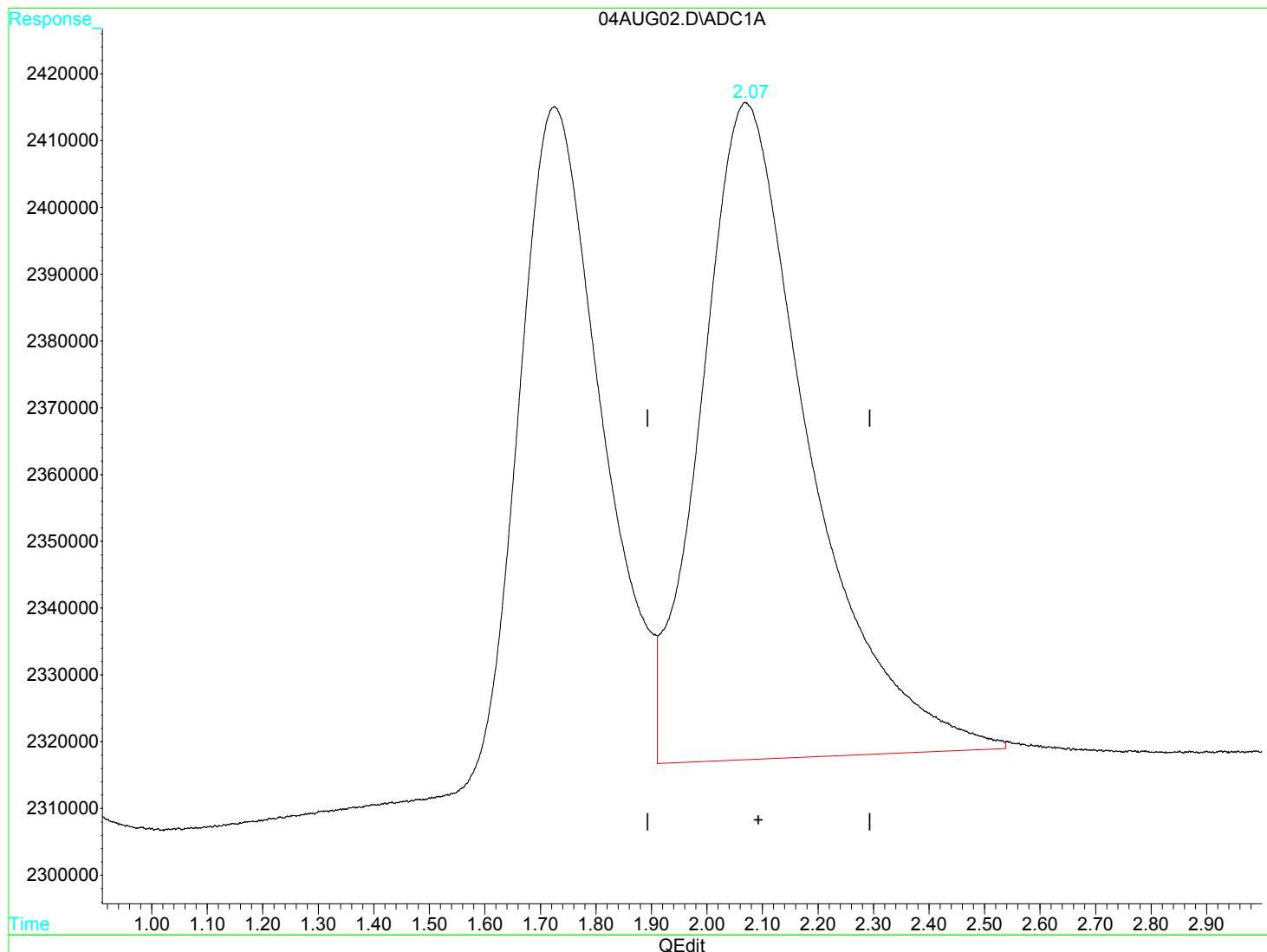
Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG02.D Vial: 2
 Acq On : 4 Aug 2017 6:36 am Operator: JH2
 Sample : 1713774-CCV1 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 6:52 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(3) Ethane (m)

2.07min 23.002ug/L m

response 13361975

(+) = Expected Retention Time

04AUG02.D RSK175.M Mon Aug 07 08:54:39 2017

MSD1

BC Laboratories, Inc, Page 92 of 925

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG10.D Vial: 10
Acq On : 4 Aug 2017 7:33 am Operator: JH2
Sample : 1713774-CCV2 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:03 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

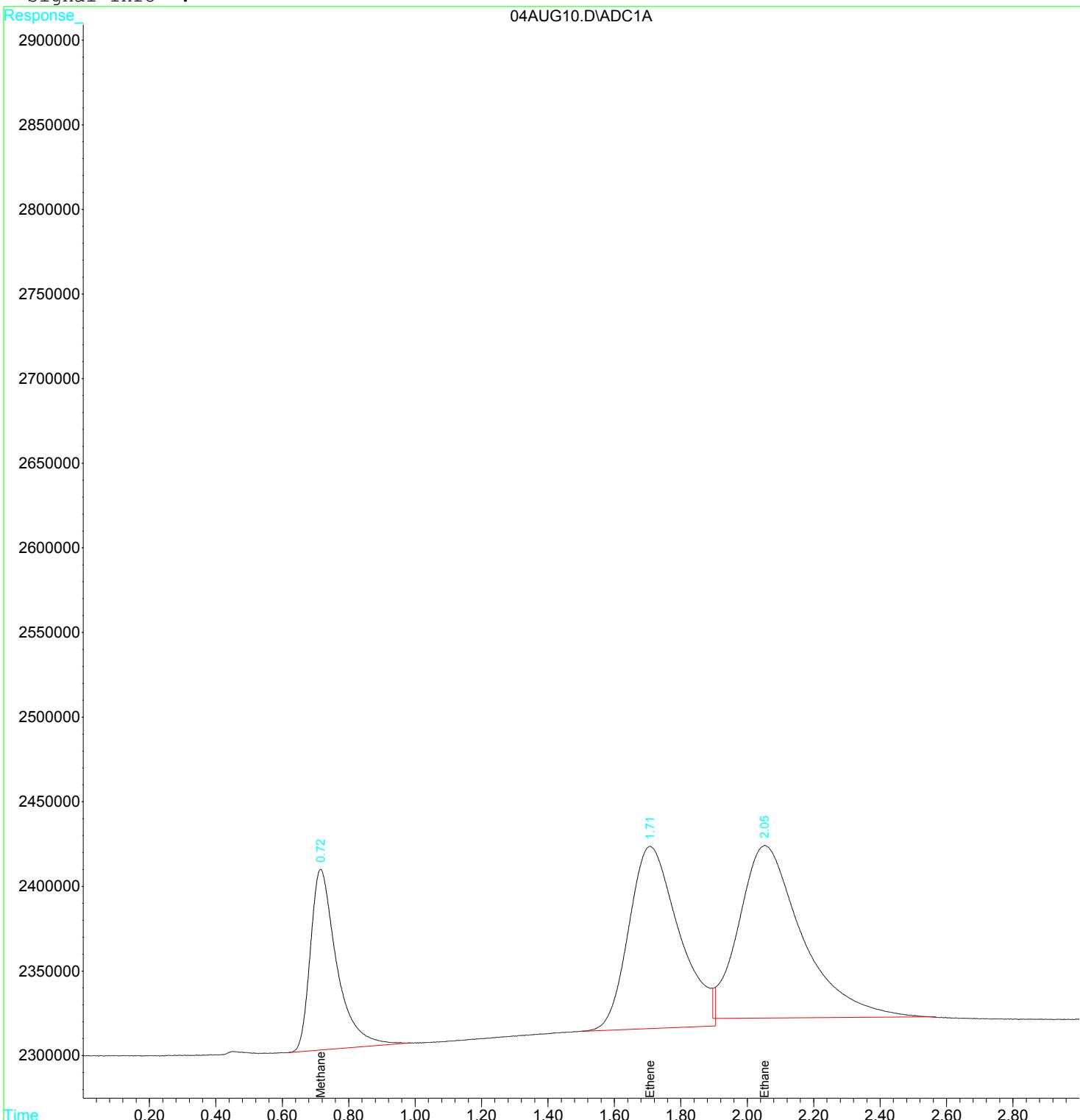
Compound	R.T.	Response	Conc	Units
<hr/>				
Target Compounds				
1) m Methane	0.72	5859882	9.6811	ug/L m
2) m Ethene	1.71	11414816	28.3614	ug/L m
3) m Ethane	2.05	13516370	23.2675	ug/L m

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG10.D Vial: 10
Acq On : 4 Aug 2017 7:33 am Operator: JH2
Sample : 1713774-CCV2 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:03:45 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

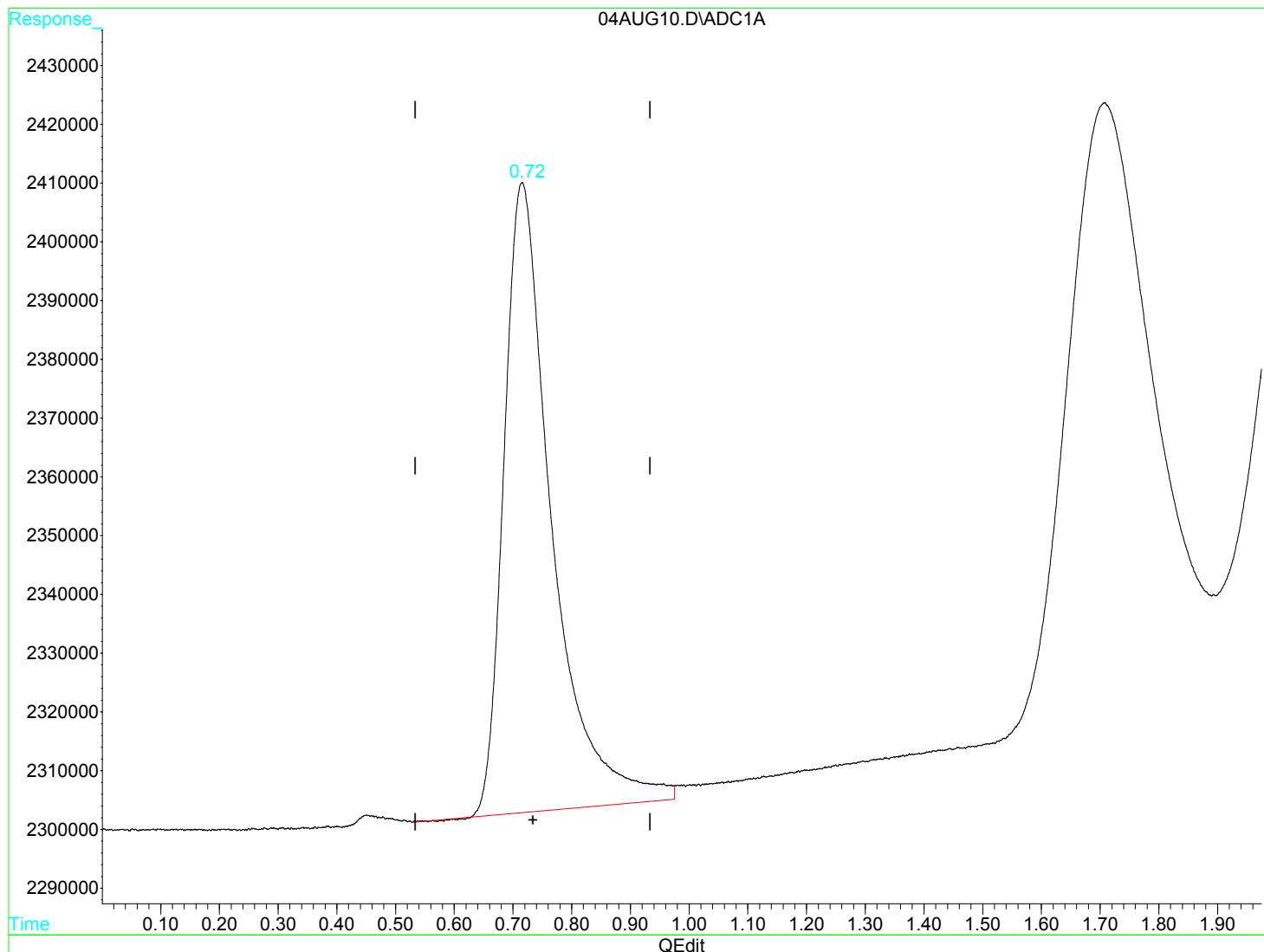
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG10.D Vial: 10
Acq On : 4 Aug 2017 7:33 am Operator: JH2
Sample : 1713774-CCV2 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 7:36 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(1) Methane (m)

0.72min 10.043ug/L

response 6078716

(+) = Expected Retention Time

04AUG10.D RSK175.M Mon Aug 07 09:02:53 2017

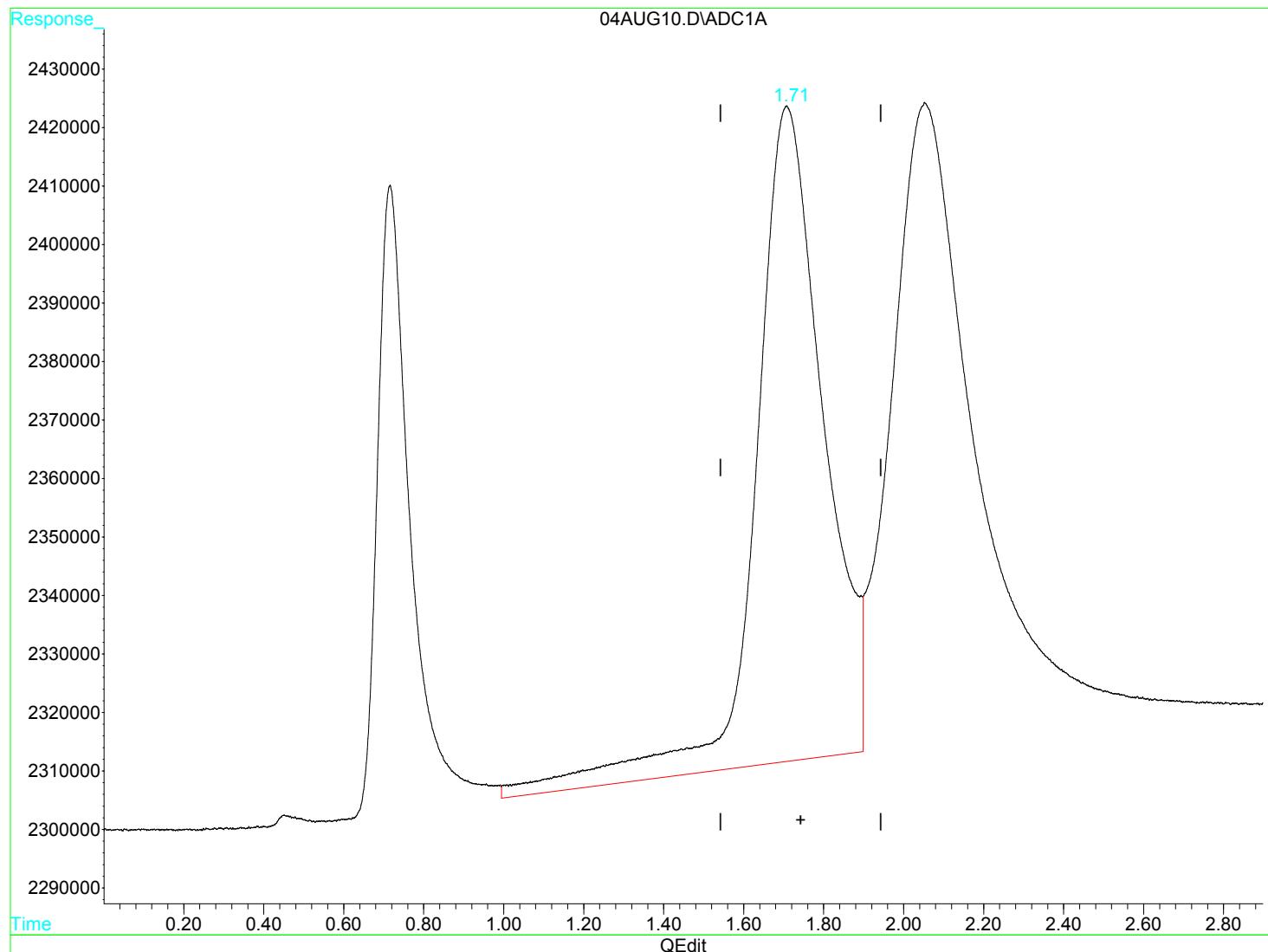
MSD1

BC Laboratories, Inc, Page 95 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG10.D Vial: 10
Acq On : 4 Aug 2017 7:33 am Operator: JH2
Sample : 1713774-CCV2 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 7:36 2017 Quant Results File: RSK175.RES

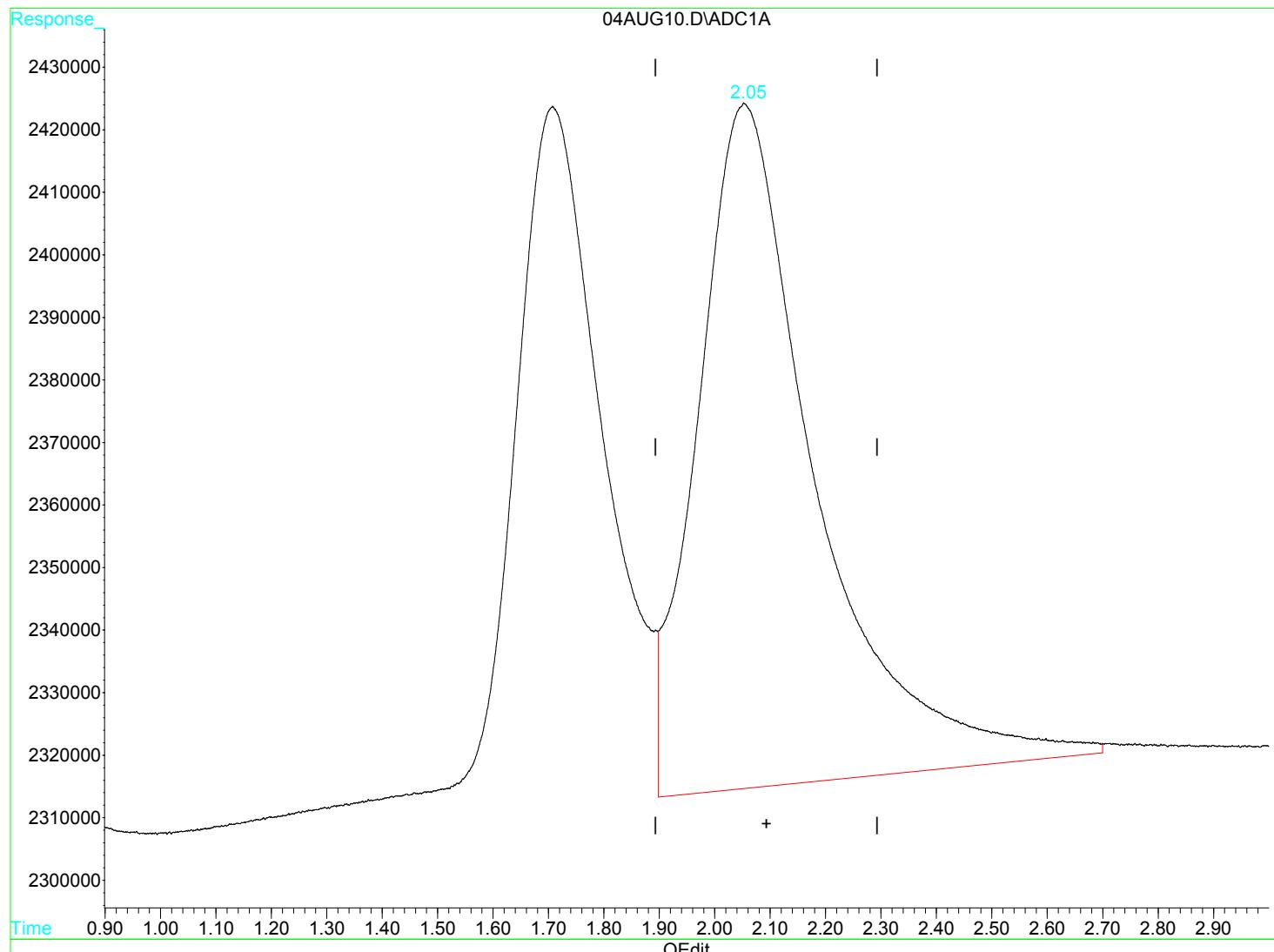
Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG10.D Vial: 10
 Acq On : 4 Aug 2017 7:33 am Operator: JH2
 Sample : 1713774-CCV2 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 7:36 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(3) Ethane (m)

2.05min 27.872ug/L

response 16191007

(+) = Expected Retention Time

04AUG10.D RSK175.M Mon Aug 07 09:03:28 2017

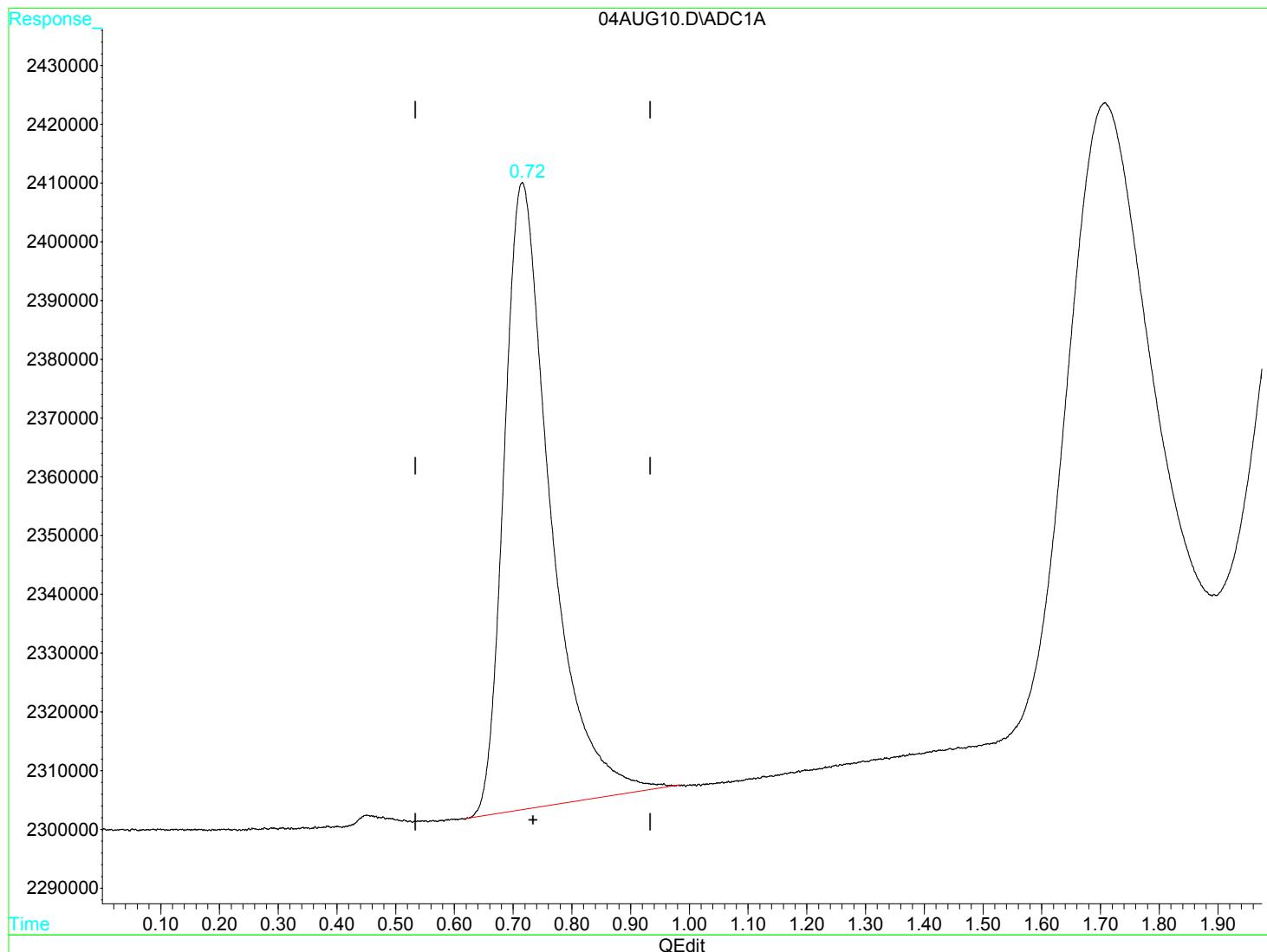
MSD1

BC Laboratories, Inc, Page 97 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG10.D Vial: 10
Acq On : 4 Aug 2017 7:33 am Operator: JH2
Sample : 1713774-CCV2 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 7:36 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(1) Methane (m)

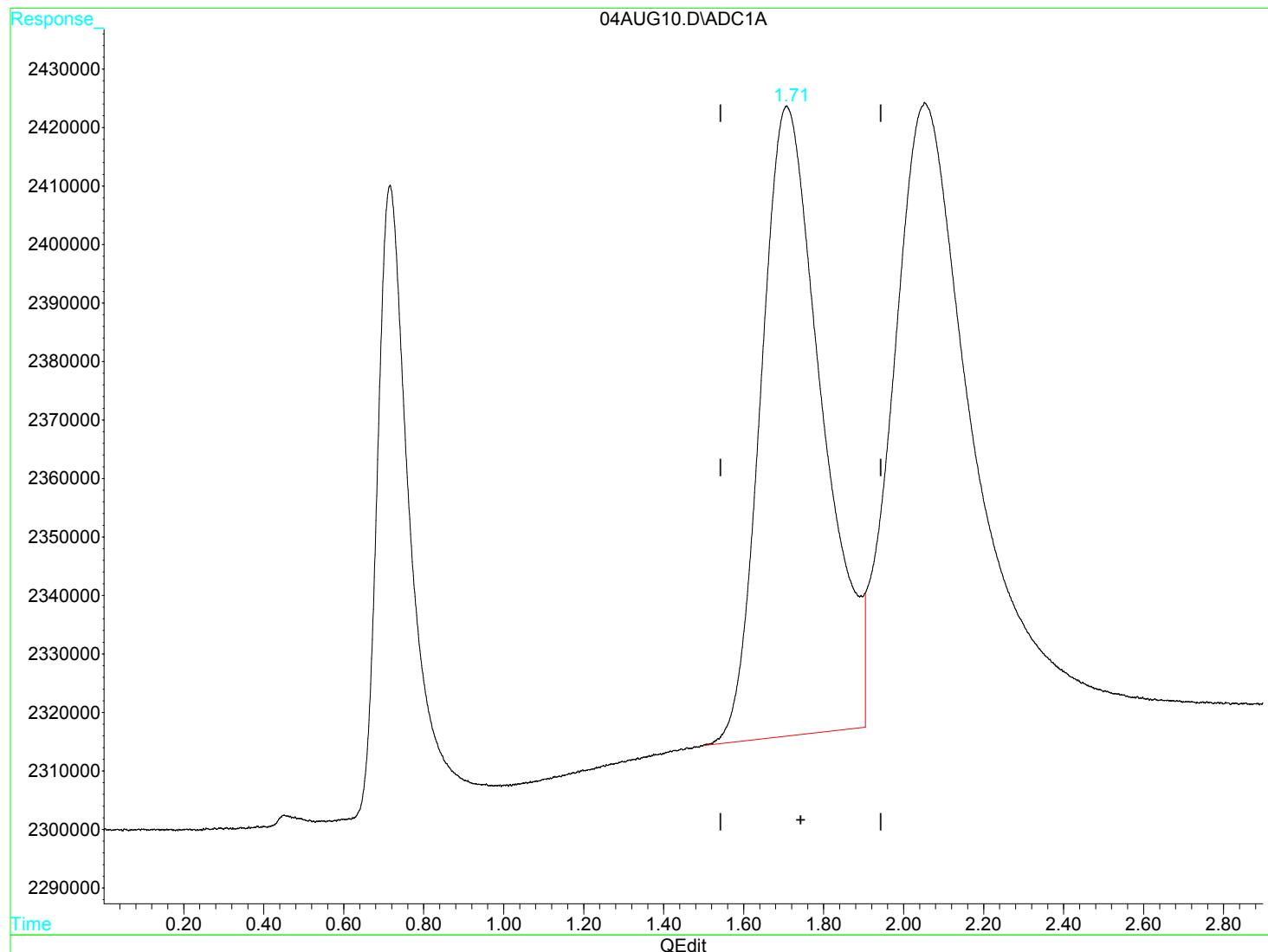
0.72min 9.681ug/L m

response 5859882

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG10.D Vial: 10
Acq On : 4 Aug 2017 7:33 am Operator: JH2
Sample : 1713774-CCV2 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 7:36 2017 Quant Results File: RSK175.RES

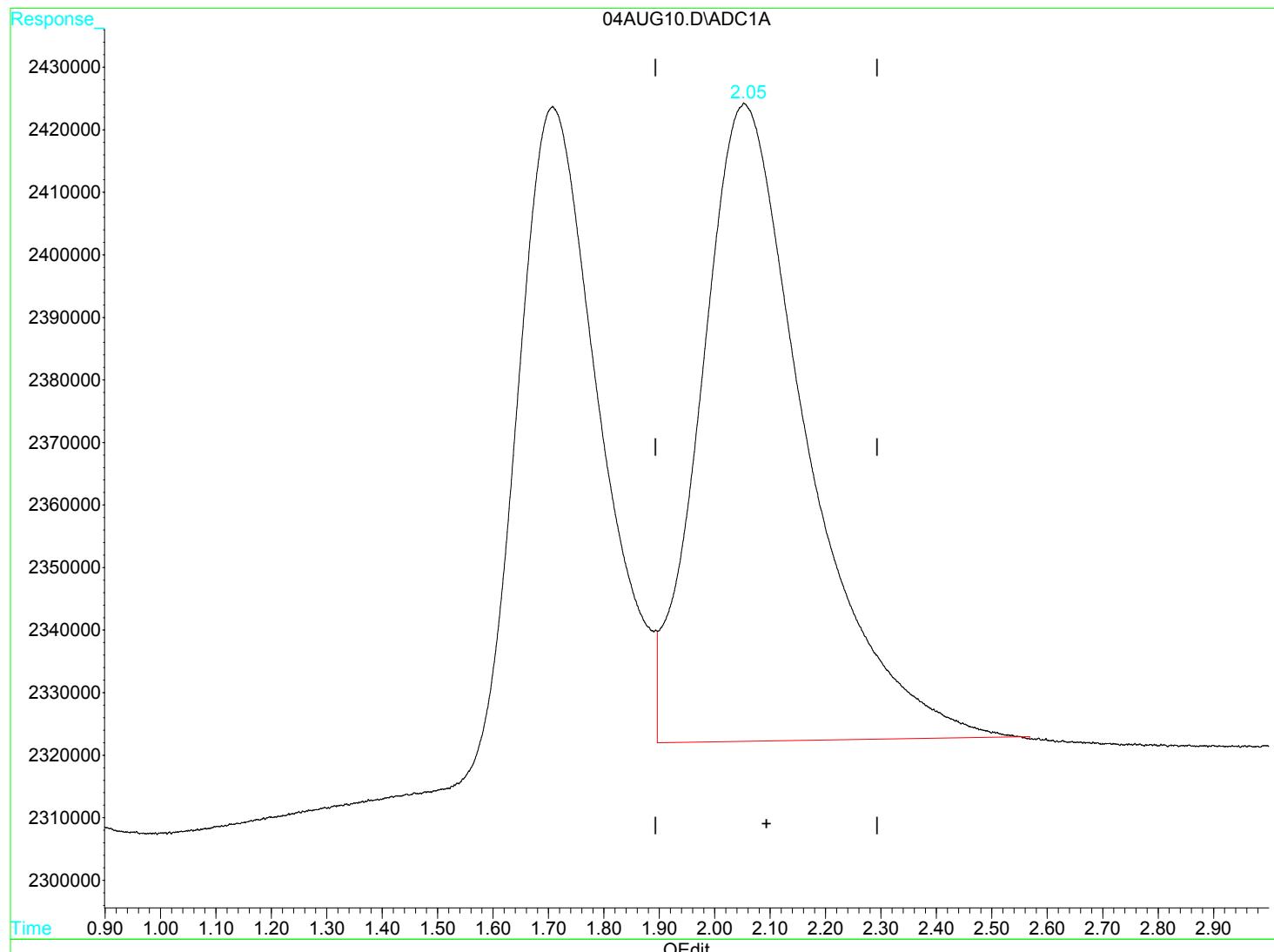
Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG10.D Vial: 10
Acq On : 4 Aug 2017 7:33 am Operator: JH2
Sample : 1713774-CCV2 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 7:36 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(3) Ethane (m)

2.05min 23.267ug/L m

response 13516370

(+) = Expected Retention Time

04AUG10.D RSK175.M Mon Aug 07 09:03:35 2017

MSD1

BC Laboratories, Inc, Page 100 of 925

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG22.D Vial: 22
Acq On : 4 Aug 2017 10:29 am Operator: JH2
Sample : 1713774-CCV3 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:09 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

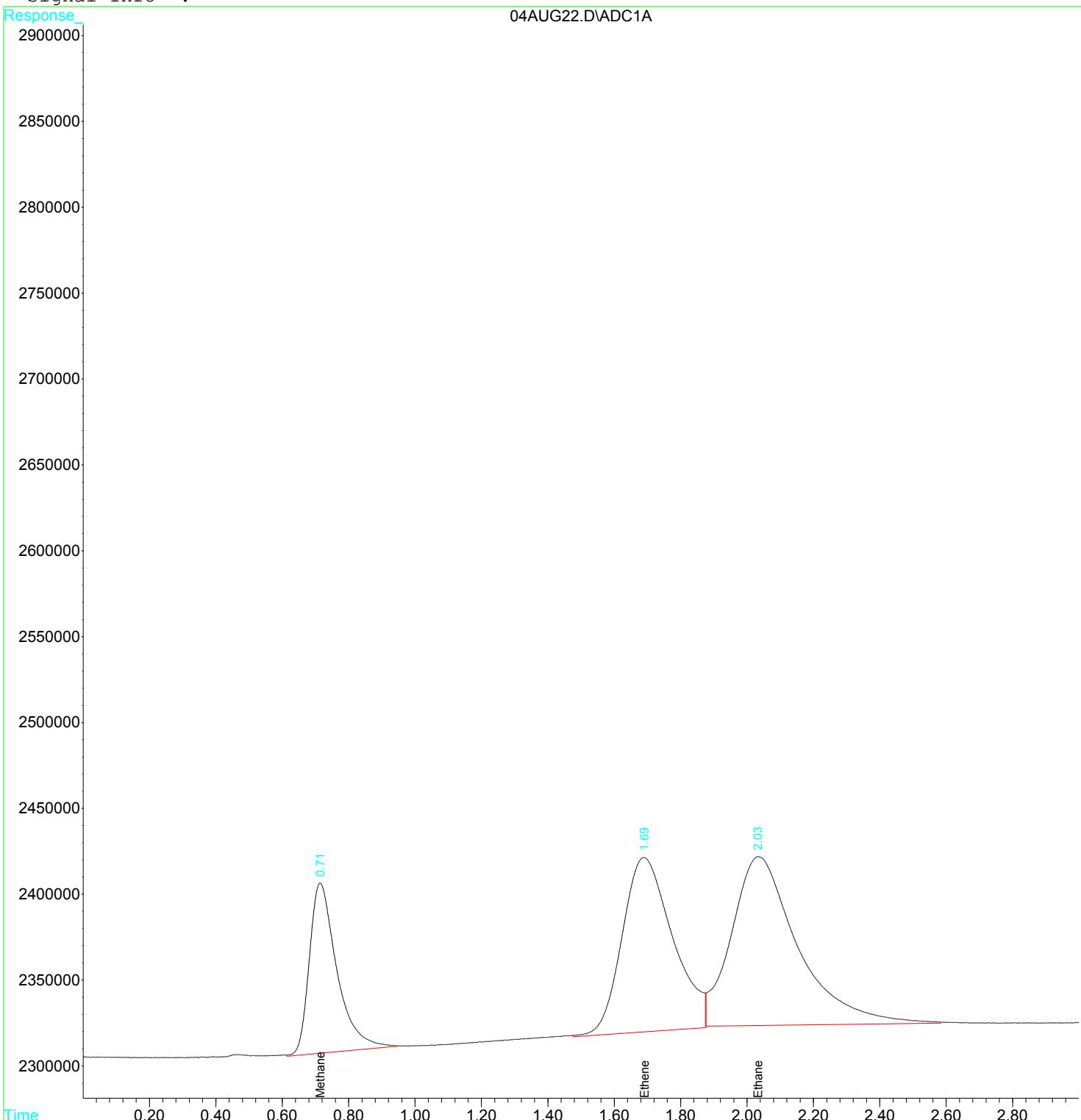
Compound	R.T.	Response	Conc	Units
<hr/>				
Target Compounds				
1) m Methane	0.71	5696573	9.4113	ug/L m
2) m Ethene	1.69	10748744	26.7065	ug/L m
3) m Ethane	2.03	13659810	23.5144	ug/L m

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG22.D Vial: 22
Acq On : 4 Aug 2017 10:29 am Operator: JH2
Sample : 1713774-CCV3 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:09 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

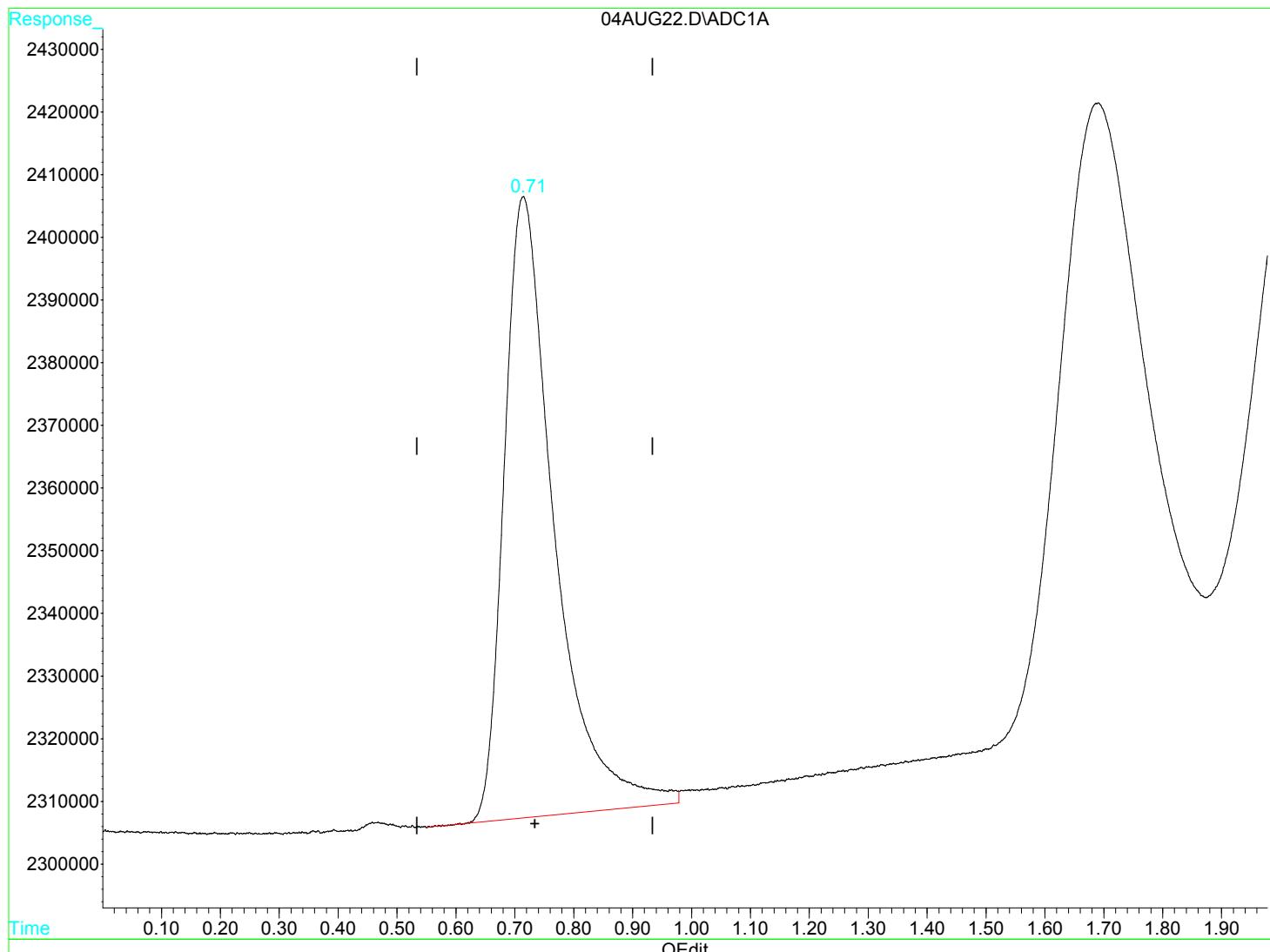
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG22.D Vial: 22
Acq On : 4 Aug 2017 10:29 am Operator: JH2
Sample : 1713774-CCV3 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 10:32 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(1) Methane (m)

0.71min 9.693ug/L

response 5867334

(+) = Expected Retention Time

04AUG22.D RSK175.M Mon Aug 07 09:09:11 2017

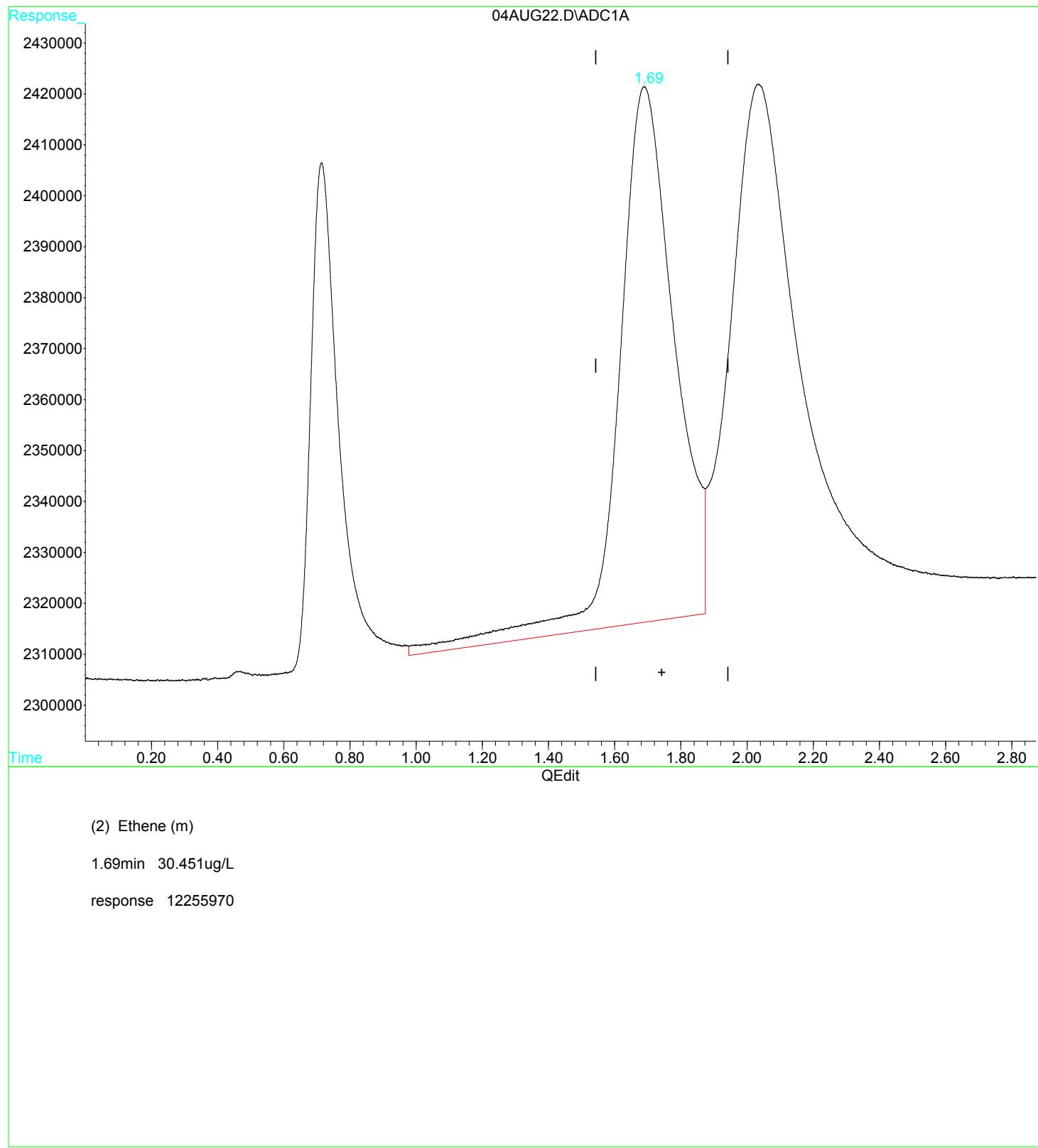
MSD1

BC Laboratories, Inc, Page 103 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG22.D Vial: 22
Acq On : 4 Aug 2017 10:29 am Operator: JH2
Sample : 1713774-CCV3 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 10:32 2017 Quant Results File: RSK175.RES

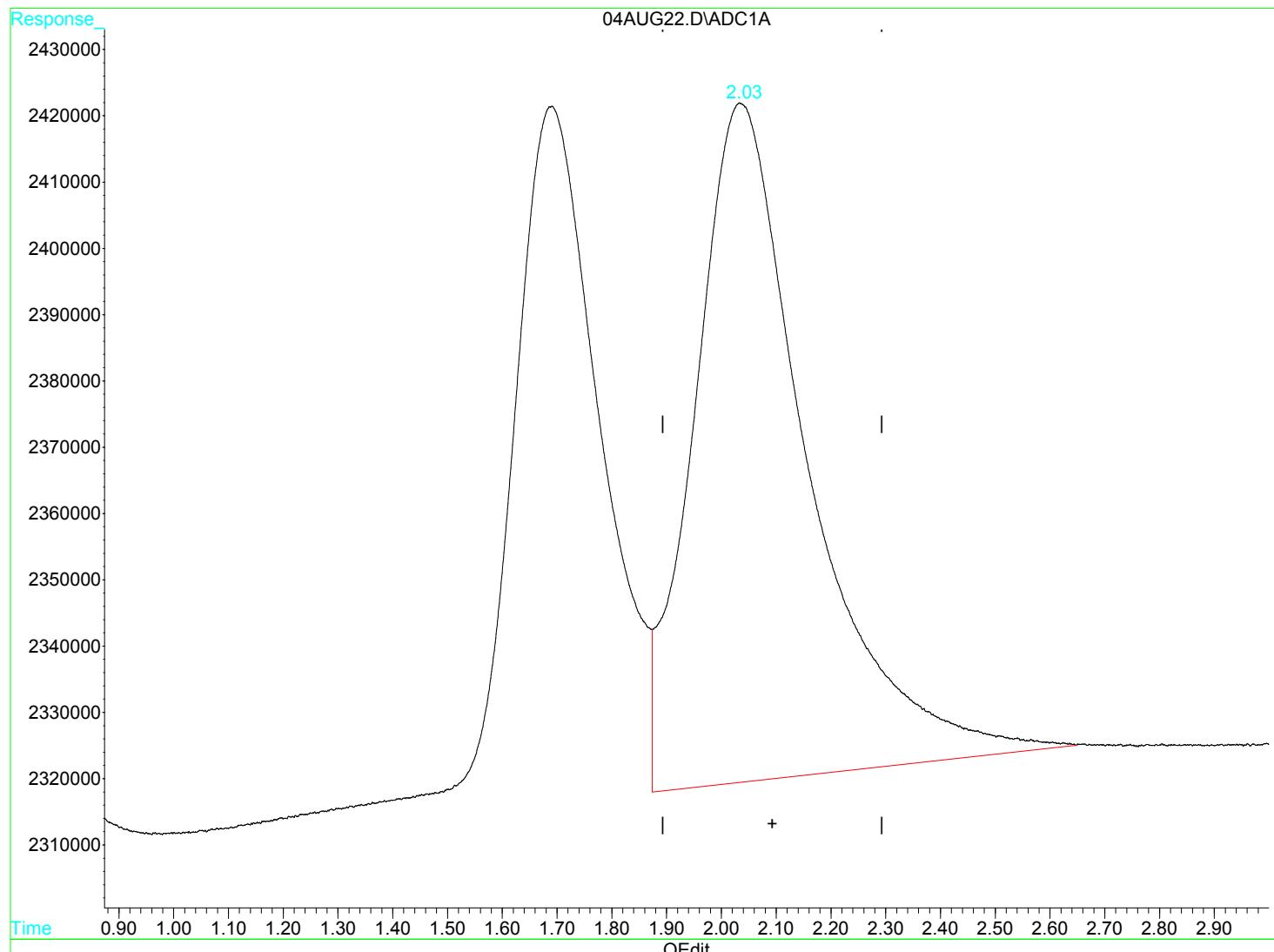
Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG22.D Vial: 22
Acq On : 4 Aug 2017 10:29 am Operator: JH2
Sample : 1713774-CCV3 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 10:32 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(3) Ethane (m)

2.03min 25.653ug/L

response 14902122

(+) = Expected Retention Time

04AUG22.D RSK175.M Mon Aug 07 09:09:44 2017

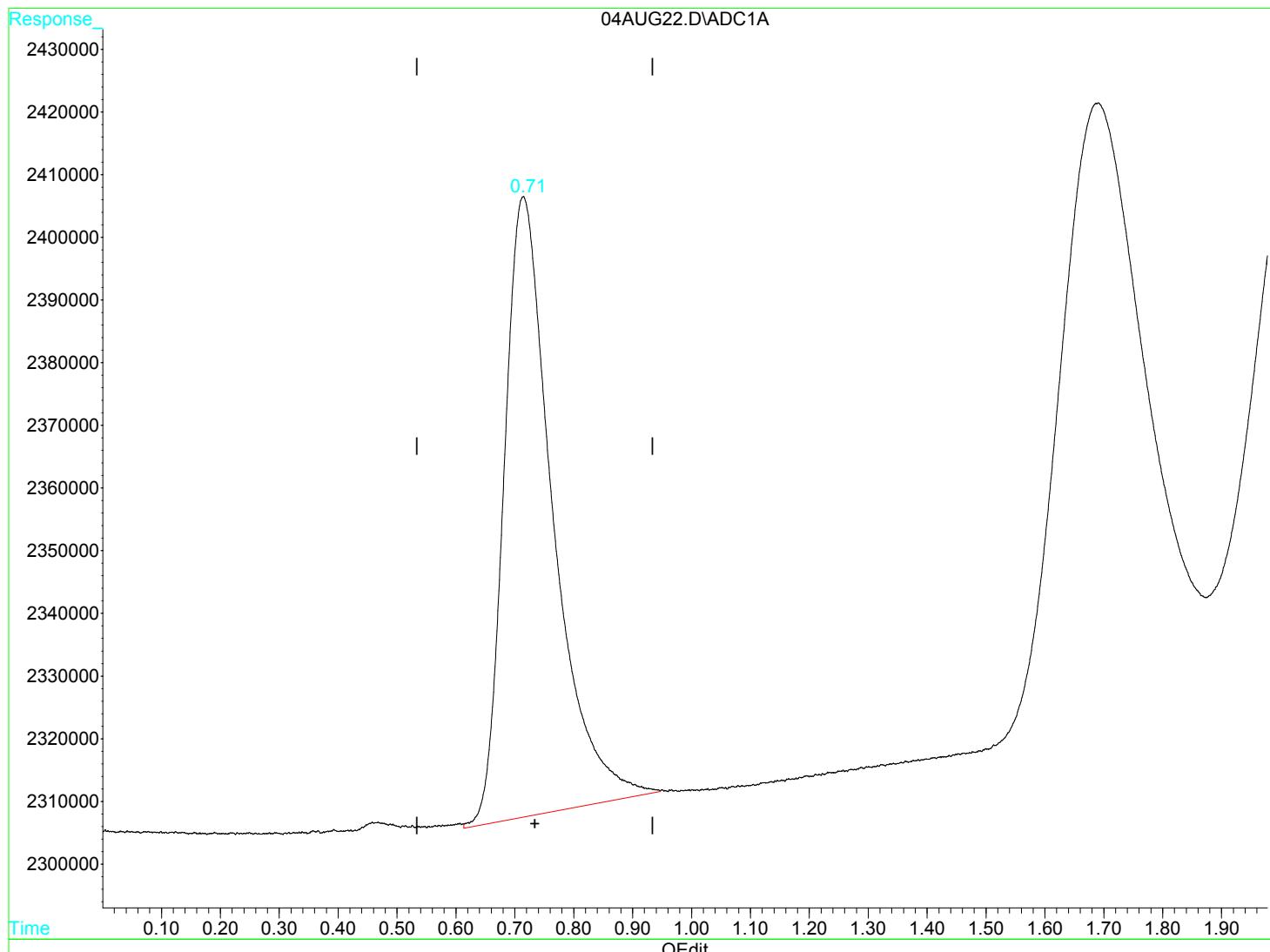
MSD1

BC Laboratories, Inc, Page 105 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG22.D Vial: 22
Acq On : 4 Aug 2017 10:29 am Operator: JH2
Sample : 1713774-CCV3 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 10:32 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(1) Methane (m)

0.71min 9.411ug/L m

response 5696573

(+) = Expected Retention Time

04AUG22.D RSK175.M Mon Aug 07 09:09:17 2017

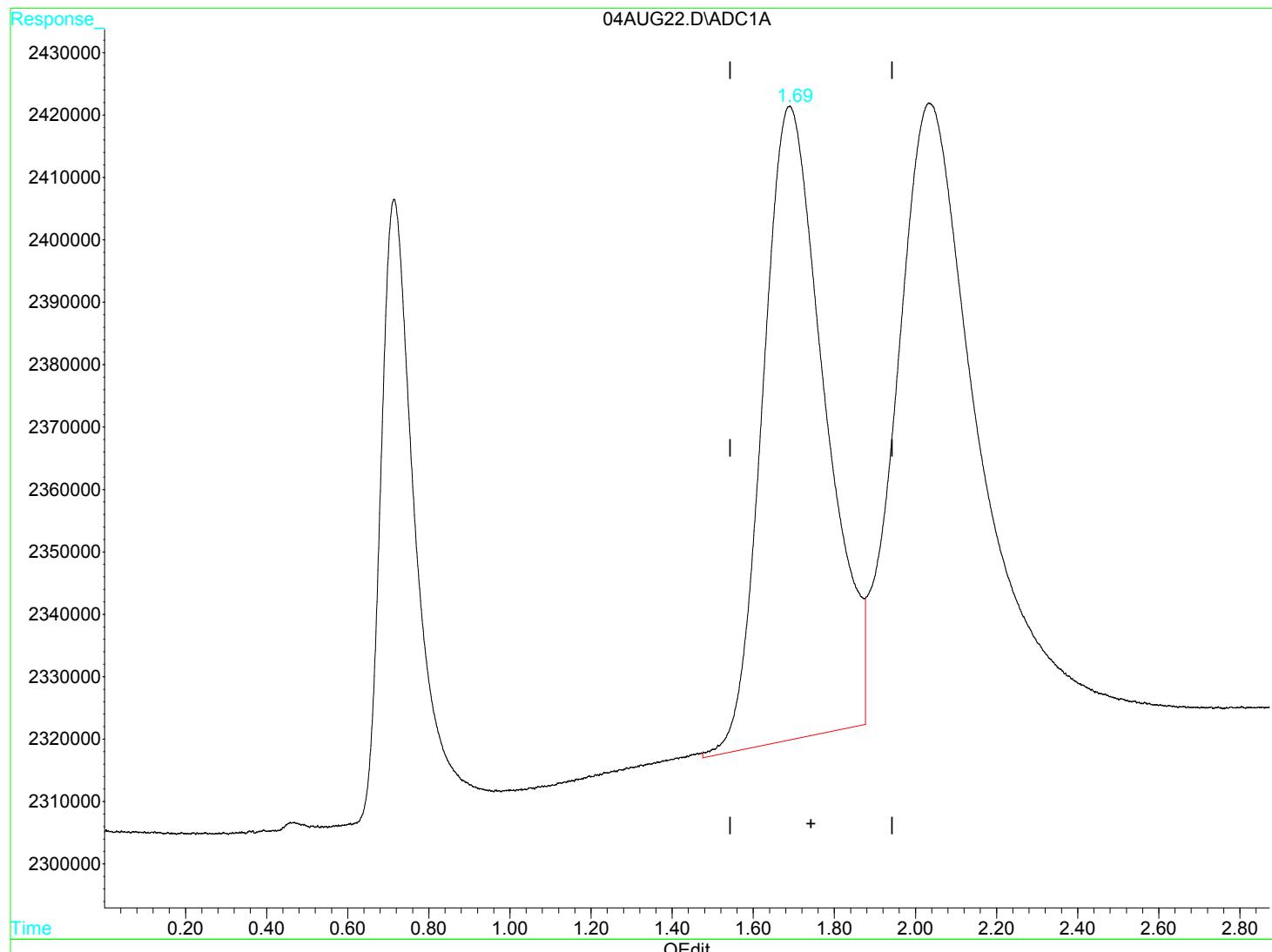
MSD1

BC Laboratories, Inc, Page 106 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG22.D Vial: 22
Acq On : 4 Aug 2017 10:29 am Operator: JH2
Sample : 1713774-CCV3 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 10:32 2017 Quant Results File: RSK175.RES

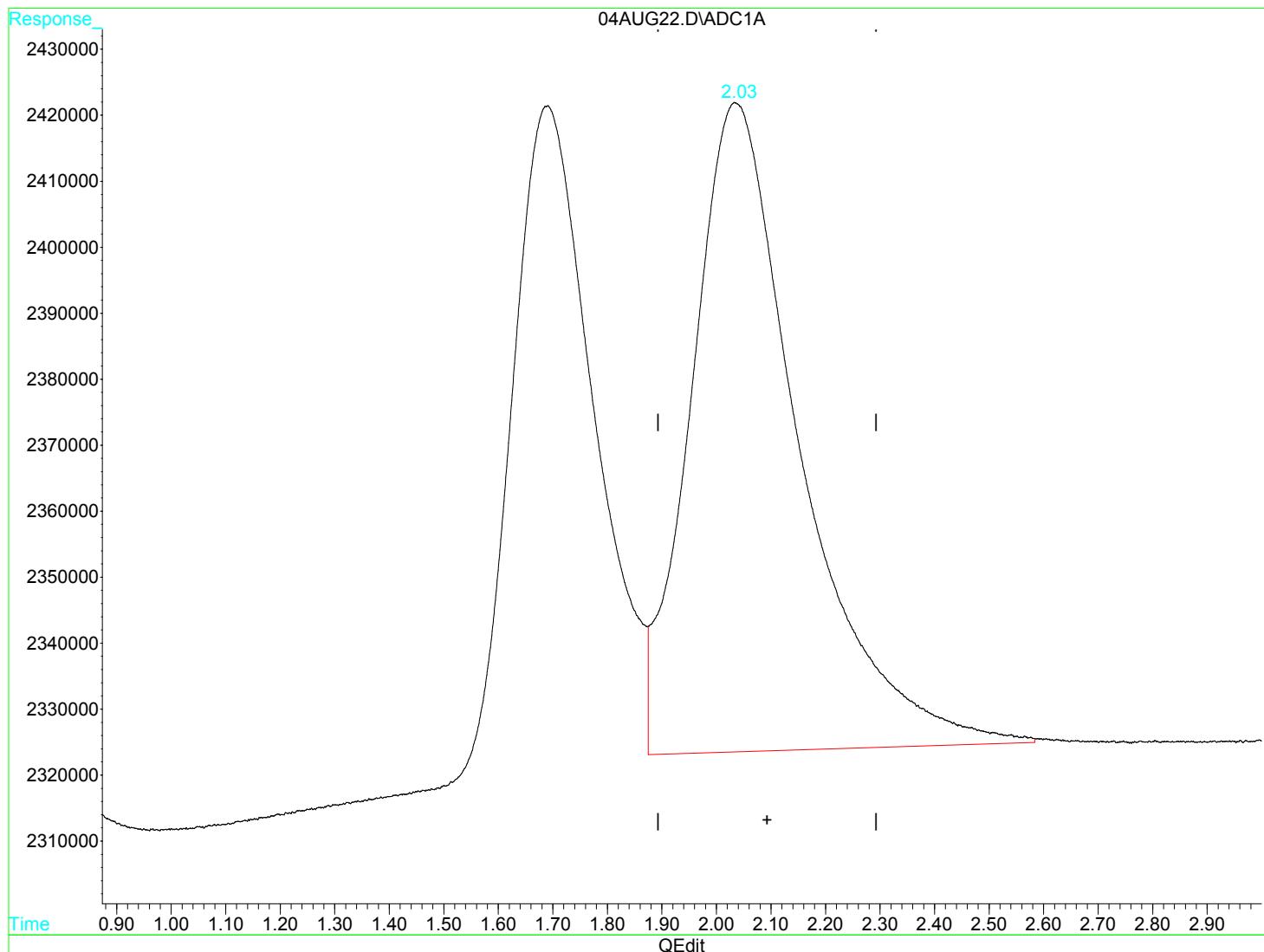
Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG22.D Vial: 22
Acq On : 4 Aug 2017 10:29 am Operator: JH2
Sample : 1713774-CCV3 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 10:32 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(3) Ethane (m)

2.03min 23.514ug/L m

response 13659810

(+) = Expected Retention Time

04AUG22.D RSK175.M Mon Aug 07 09:09:51 2017

MSD1

BC Laboratories, Inc, Page 108 of 925

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG34.D Vial: 34
Acq On : 4 Aug 2017 12:45 pm Operator: JH2
Sample : 1713774-CCV4 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:16 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units
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Target Compounds

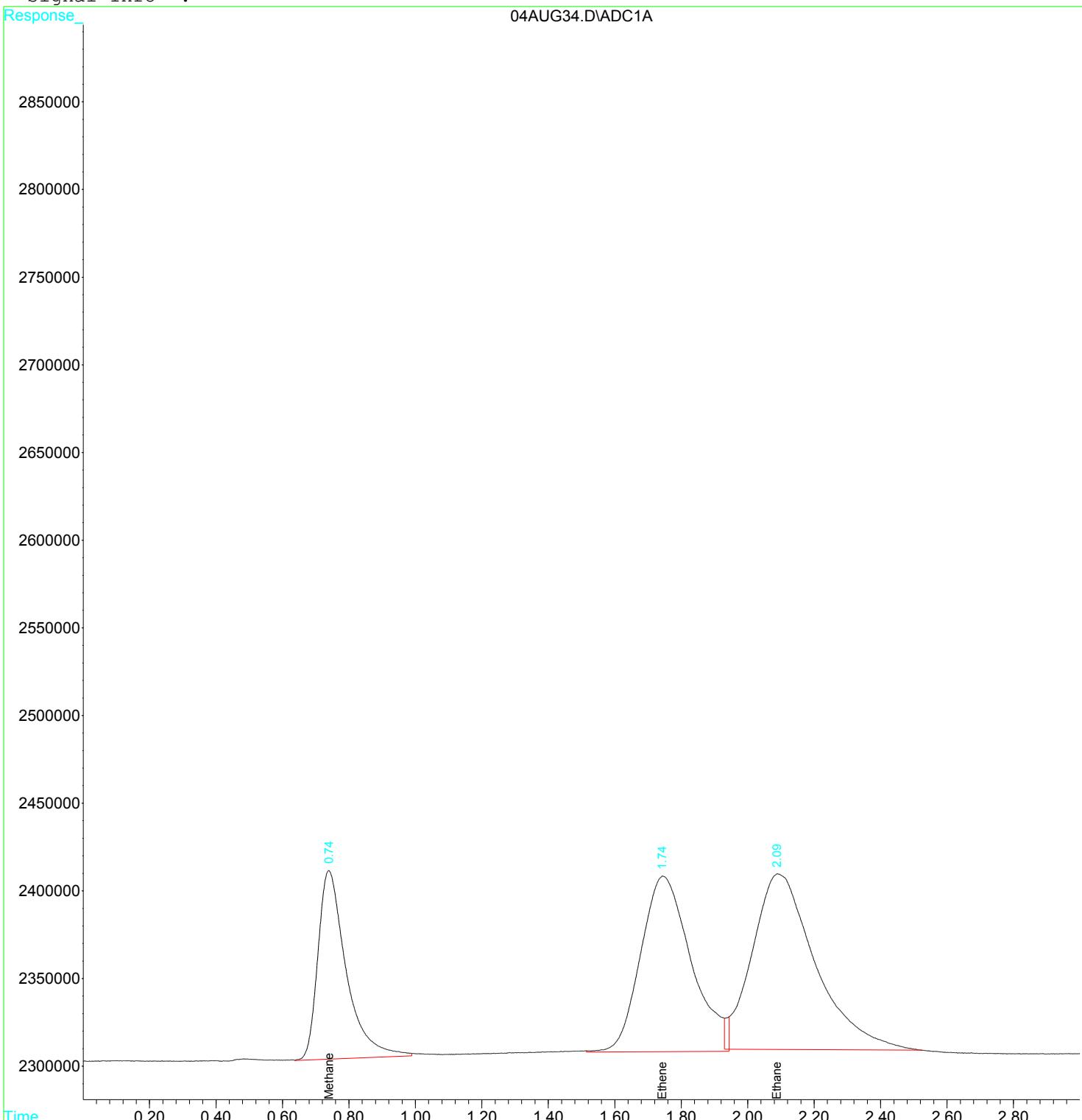
1) m	Methane	0.74	6354871	10.4988 ug/L m
2) m	Ethene	1.74	10657829	26.4806 ug/L m
3) m	Ethane	2.09	13319616	22.9288 ug/L m

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG34.D Vial: 34
Acq On : 4 Aug 2017 12:45 pm Operator: JH2
Sample : 1713774-CCV4 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:16 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

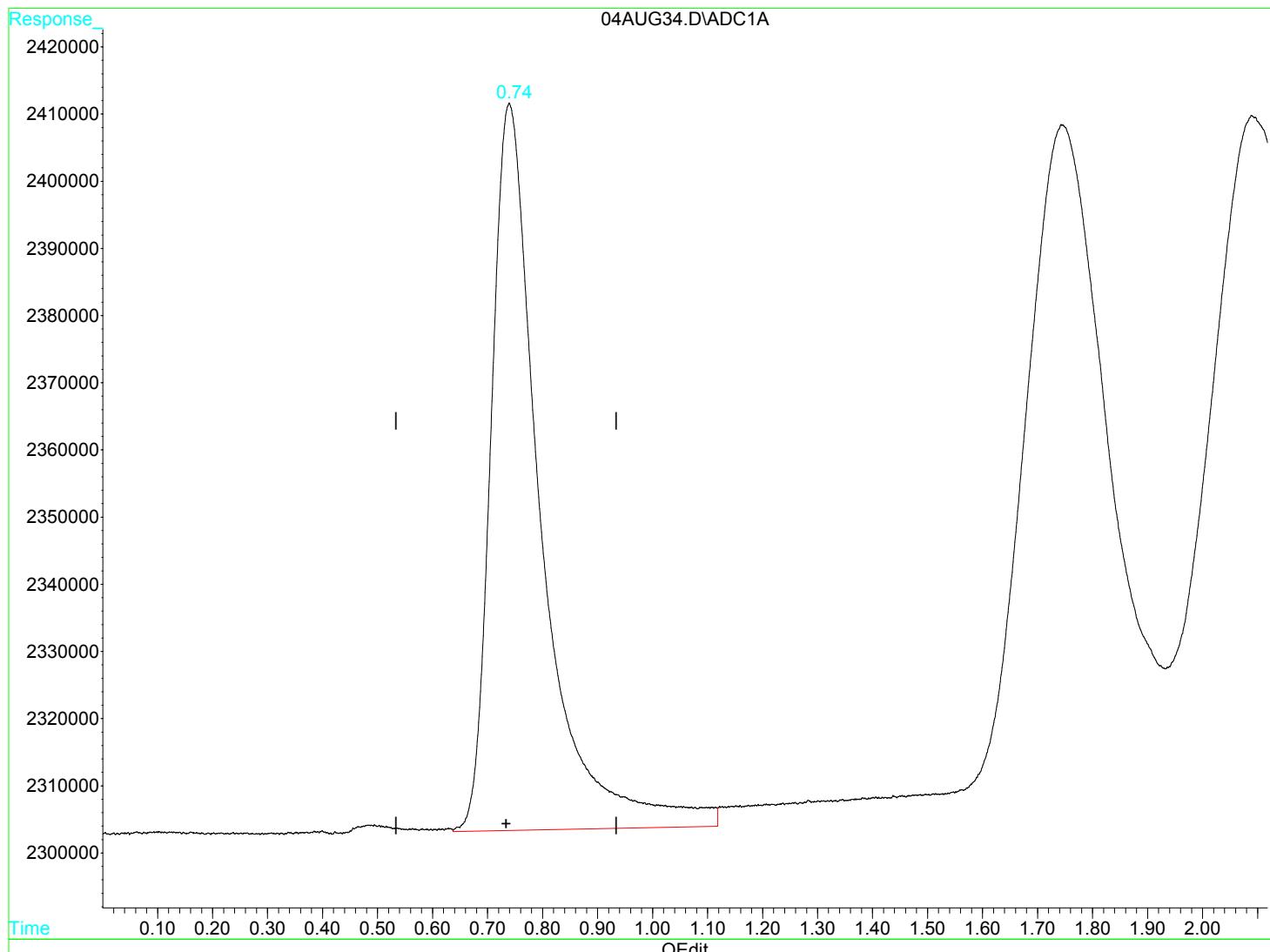
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG34.D Vial: 34
Acq On : 4 Aug 2017 12:45 pm Operator: JH2
Sample : 1713774-CCV4 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 12:48 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



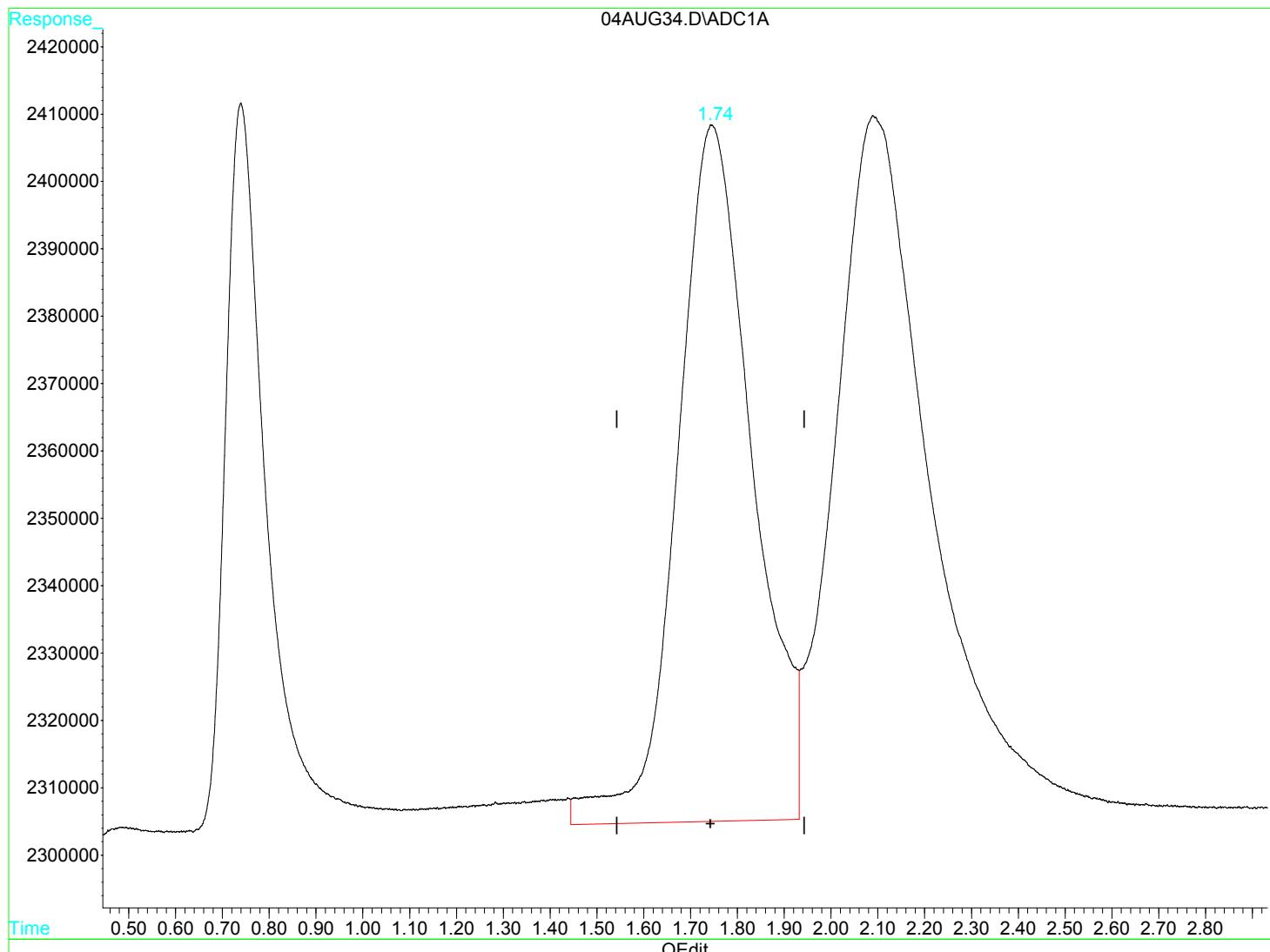
(1) Methane (m)

0.74min 11.268ug/L

response 6820676

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG34.D Vial: 34
 Acq On : 4 Aug 2017 12:45 pm Operator: JH2
 Sample : 1713774-CCV4 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 12:48 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(2) Ethene (m)

1.75min 28.592ug/L

response 11507544

(+) = Expected Retention Time

04AUG34.D RSK175.M Mon Aug 07 09:16:26 2017

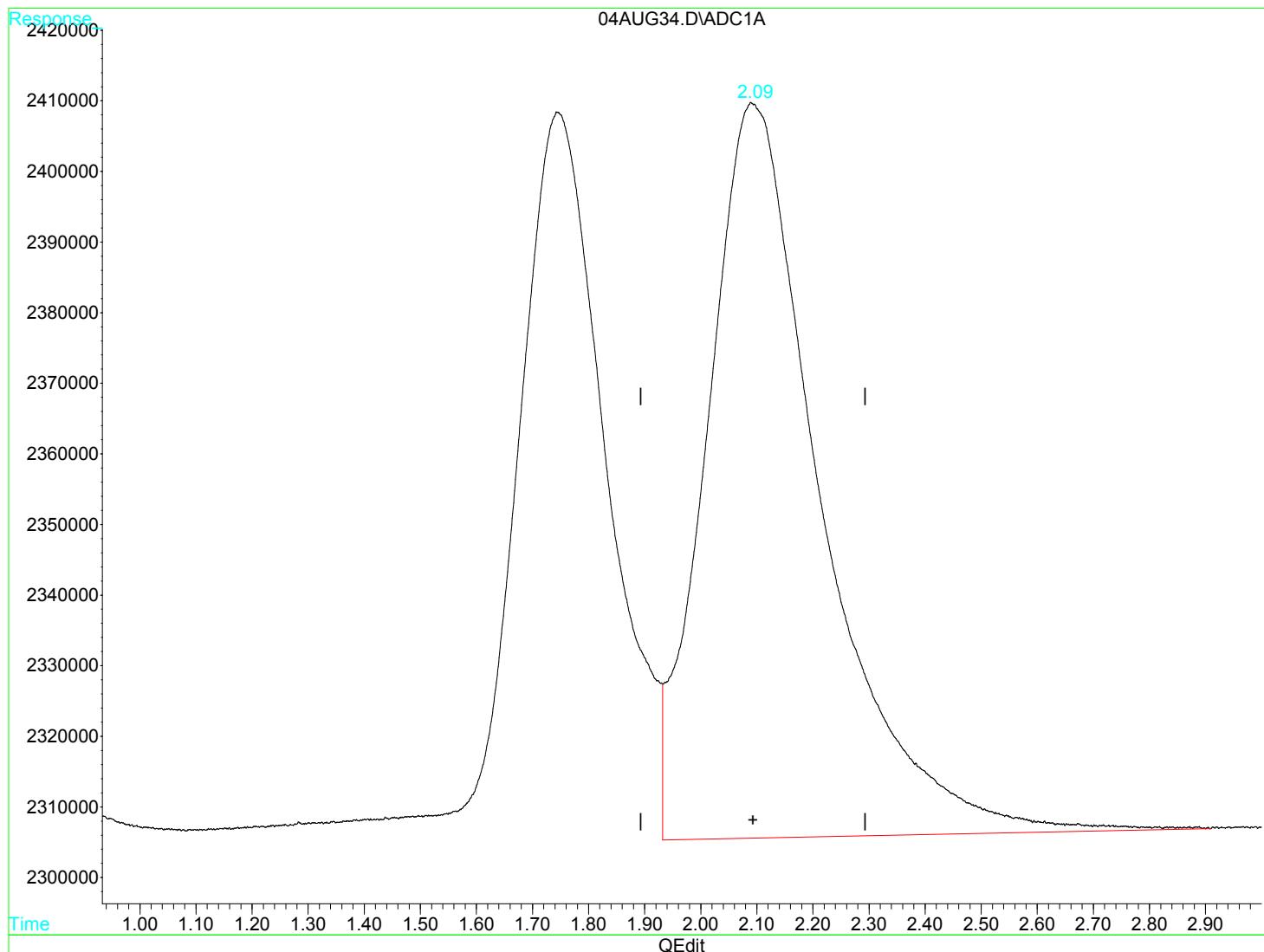
MSD1

BC Laboratories, Inc, Page 112 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG34.D Vial: 34
Acq On : 4 Aug 2017 12:45 pm Operator: JH2
Sample : 1713774-CCV4 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 12:48 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time

04AUG34.D RSK175.M Mon Aug 07 09:16:41 2017

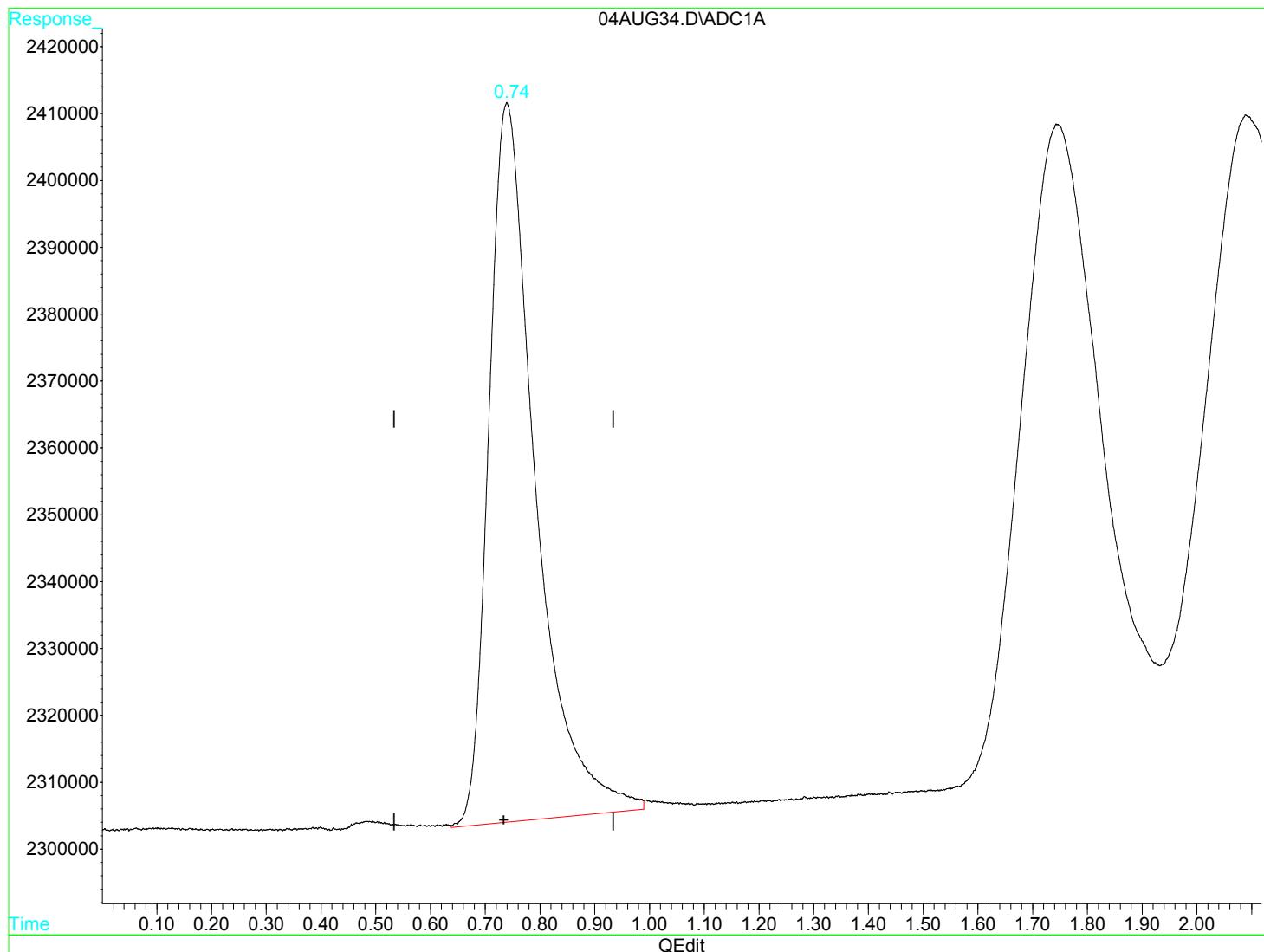
MSD1

BC Laboratories, Inc, Page 113 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG34.D Vial: 34
Acq On : 4 Aug 2017 12:45 pm Operator: JH2
Sample : 1713774-CCV4 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 12:48 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(1) Methane (m)

0.74min 10.499ug/L m

response 6354871

(+) = Expected Retention Time

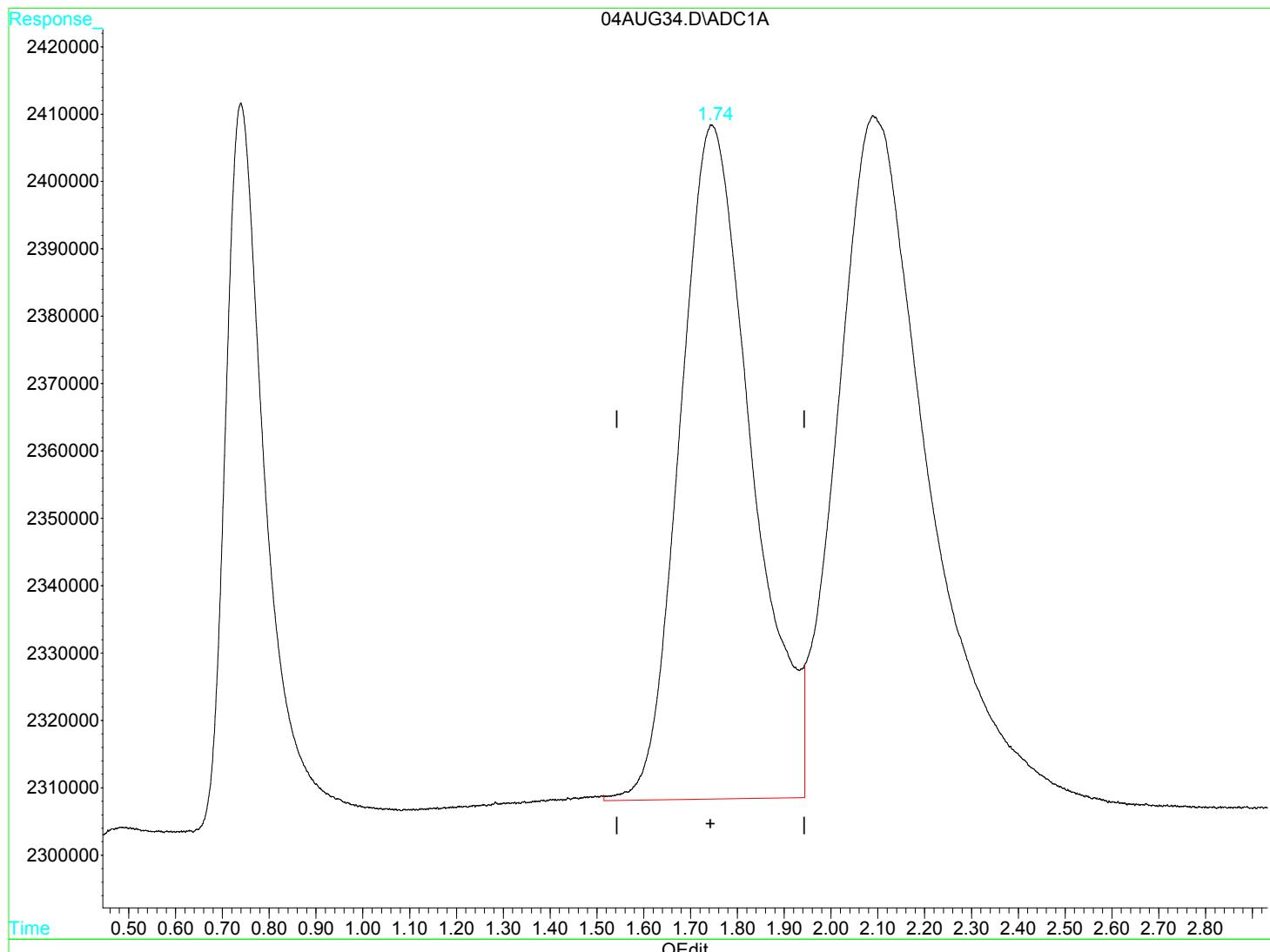
04AUG34.D RSK175.M Mon Aug 07 09:16:21 2017

MSD1

BC Laboratories, Inc, Page 114 of 925

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG34.D Vial: 34
 Acq On : 4 Aug 2017 12:45 pm Operator: JH2
 Sample : 1713774-CCV4 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 12:48 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(2) Ethene (m)

1.74min 26.481ug/L m

response 10657829

(+) = Expected Retention Time

04AUG34.D RSK175.M Mon Aug 07 09:16:35 2017

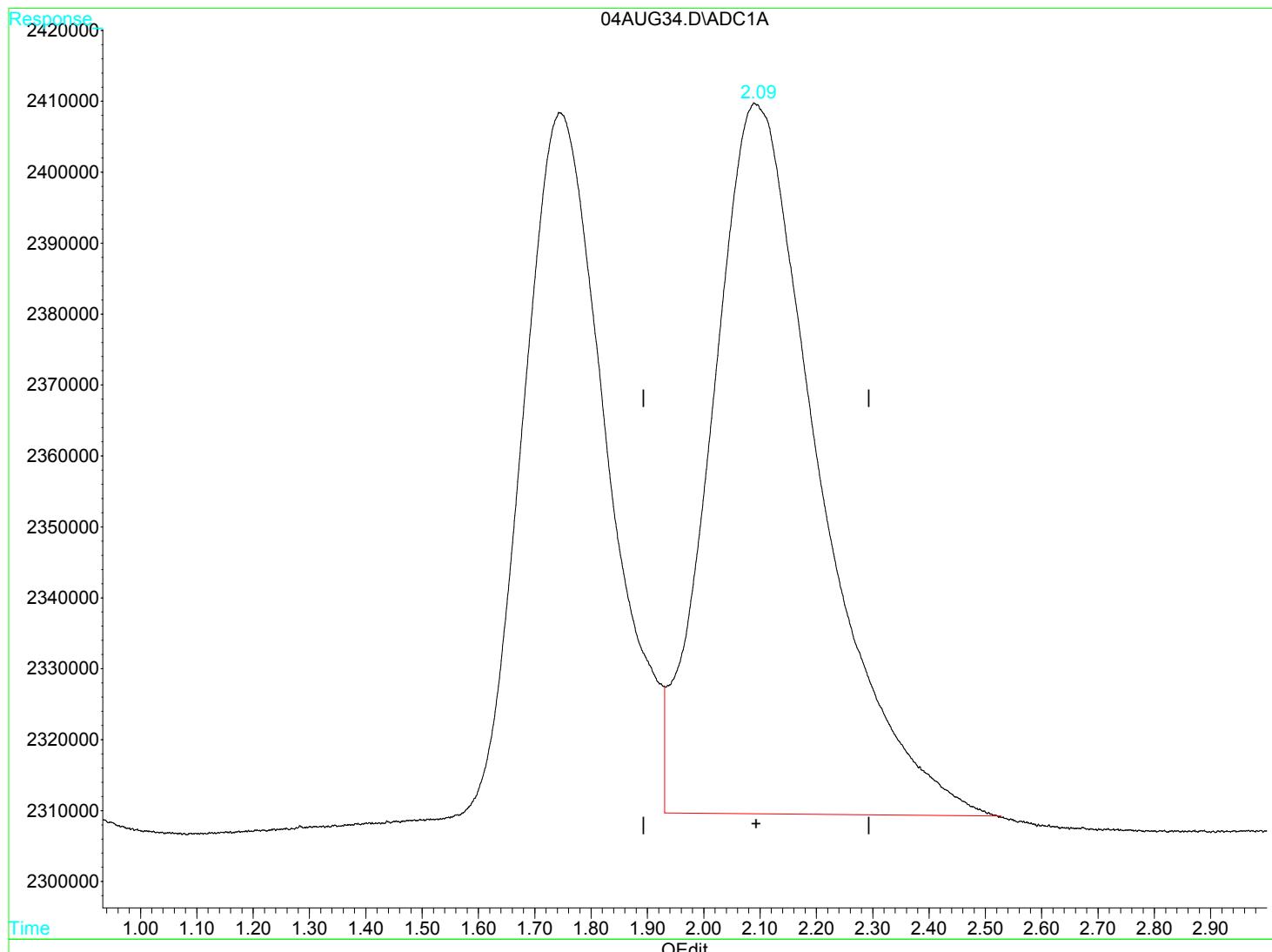
MSD1

BC Laboratories, Inc, Page 115 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG34.D Vial: 34
Acq On : 4 Aug 2017 12:45 pm Operator: JH2
Sample : 1713774-CCV4 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 12:48 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(3) Ethane (m)

2.09min 22.929ug/L m

response 13319616

(+) = Expected Retention Time

04AUG34.D RSK175.M Mon Aug 07 09:16:51 2017

MSD1

BC Laboratories, Inc, Page 116 of 925

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG40.D Vial: 40
Acq On : 4 Aug 2017 2:31 pm Operator: JH2
Sample : 1713774-CCV5 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:19 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

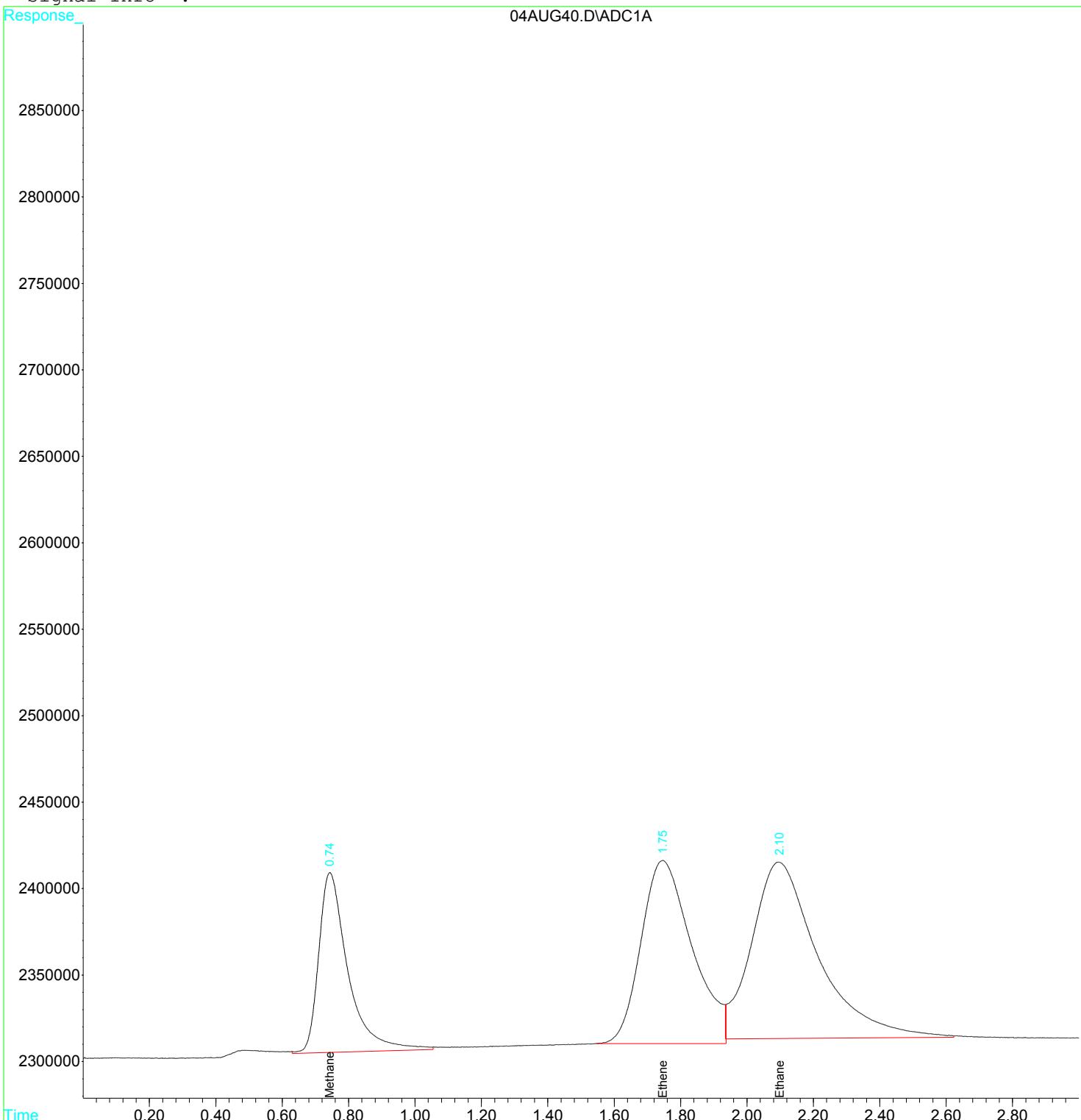
Compound	R.T.	Response	Conc	Units
<hr/>				
Target Compounds				
1) m Methane	0.74	6361709	10.5101	ug/L m
2) m Ethene	1.75	11306263	28.0917	ug/L m
3) m Ethane	2.10	14203787	24.4508	ug/L m

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG40.D Vial: 40
Acq On : 4 Aug 2017 2:31 pm Operator: JH2
Sample : 1713774-CCV5 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:19 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

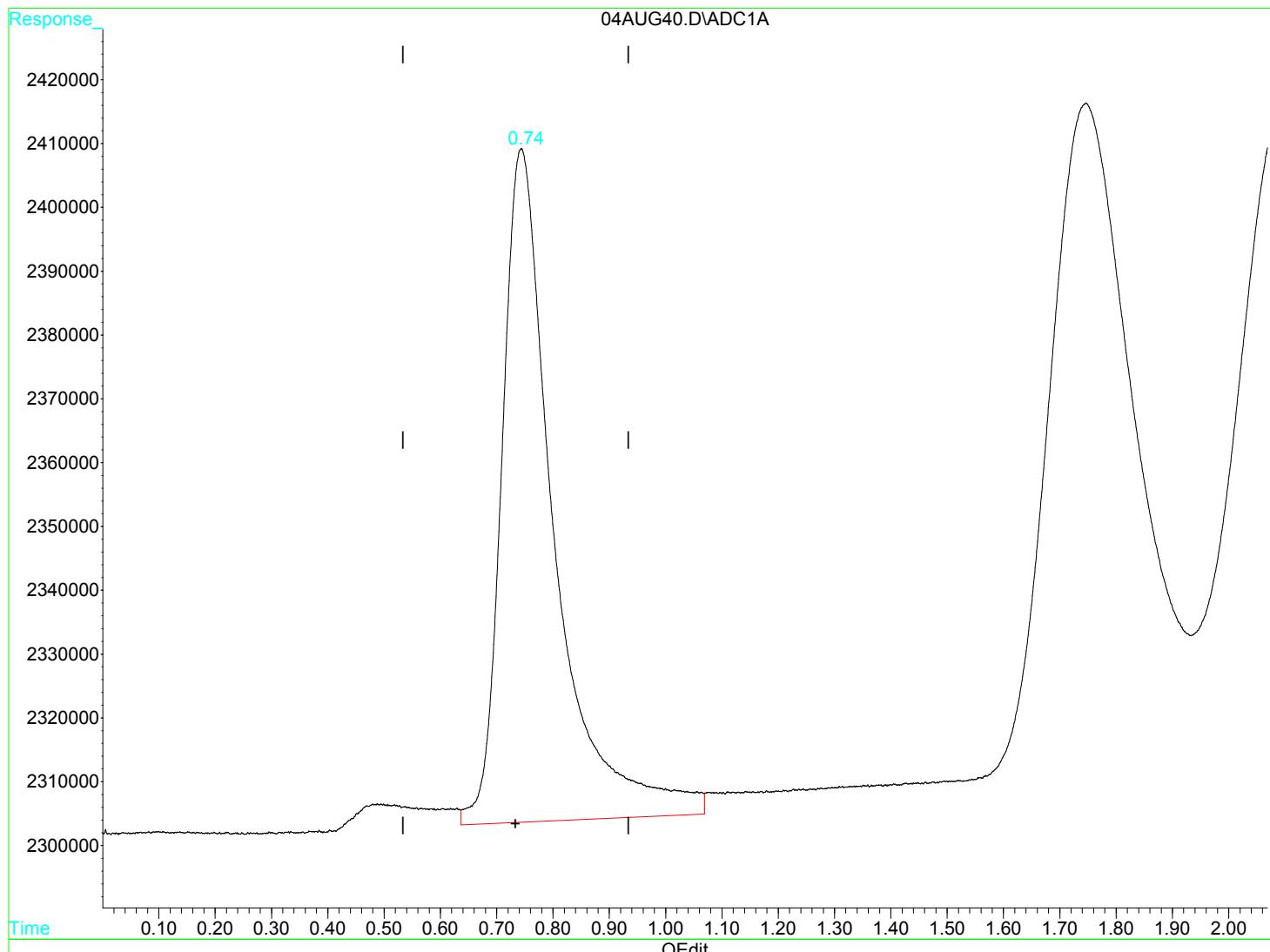
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG40.D Vial: 40
Acq On : 4 Aug 2017 2:31 pm Operator: JH2
Sample : 1713774-CCV5 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 14:34 2017 Quant Results File: RSK175.RES

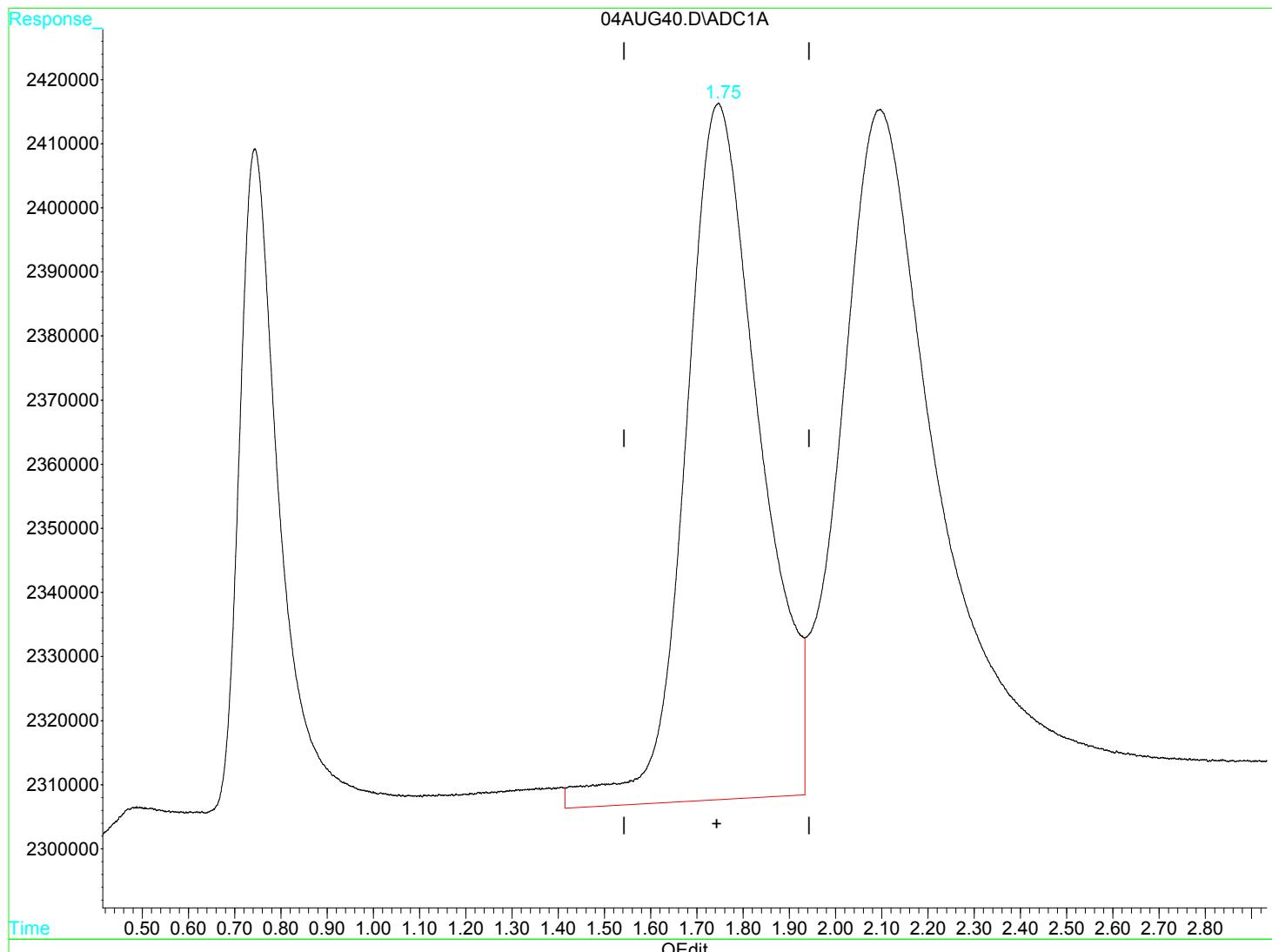
Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG40.D Vial: 40
Acq On : 4 Aug 2017 2:31 pm Operator: JH2
Sample : 1713774-CCV5 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 14:34 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(2) Ethene (m)

1.75min 30.152ug/L

response 12135639

(+) = Expected Retention Time

04AUG40.D RSK175.M Mon Aug 07 09:18:53 2017

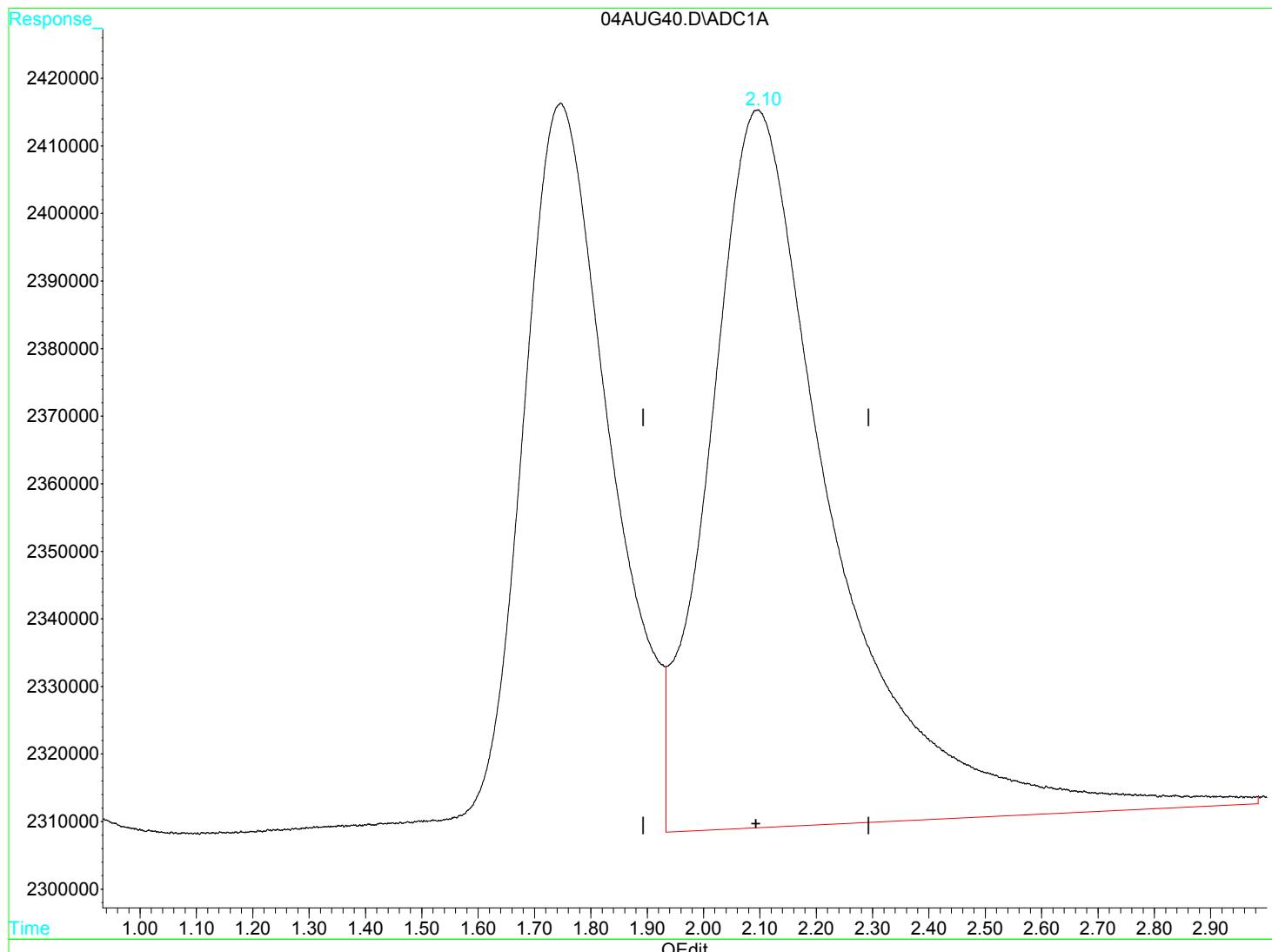
MSD1

BC Laboratories, Inc, Page 120 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG40.D Vial: 40
Acq On : 4 Aug 2017 2:31 pm Operator: JH2
Sample : 1713774-CCV5 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 14:34 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time

04AUG40.D RSK175.M Mon Aug 07 09:19:07 2017

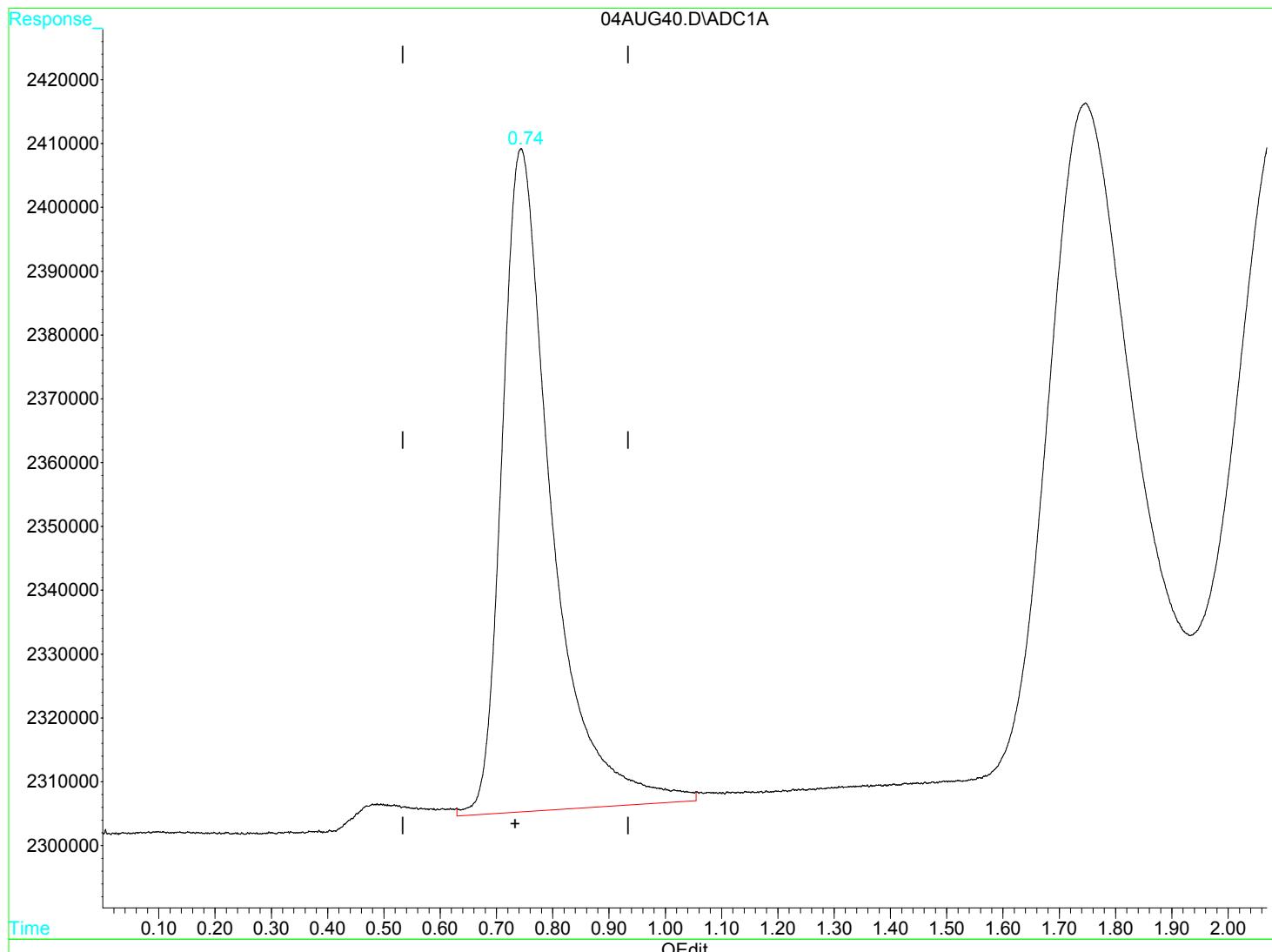
MSD1

BC Laboratories, Inc, Page 121 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG40.D Vial: 40
Acq On : 4 Aug 2017 2:31 pm Operator: JH2
Sample : 1713774-CCV5 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 14:34 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(1) Methane (m)

0.74min 10.510ug/L m

response 6361709

(+) = Expected Retention Time

04AUG40.D RSK175.M Mon Aug 07 09:18:46 2017

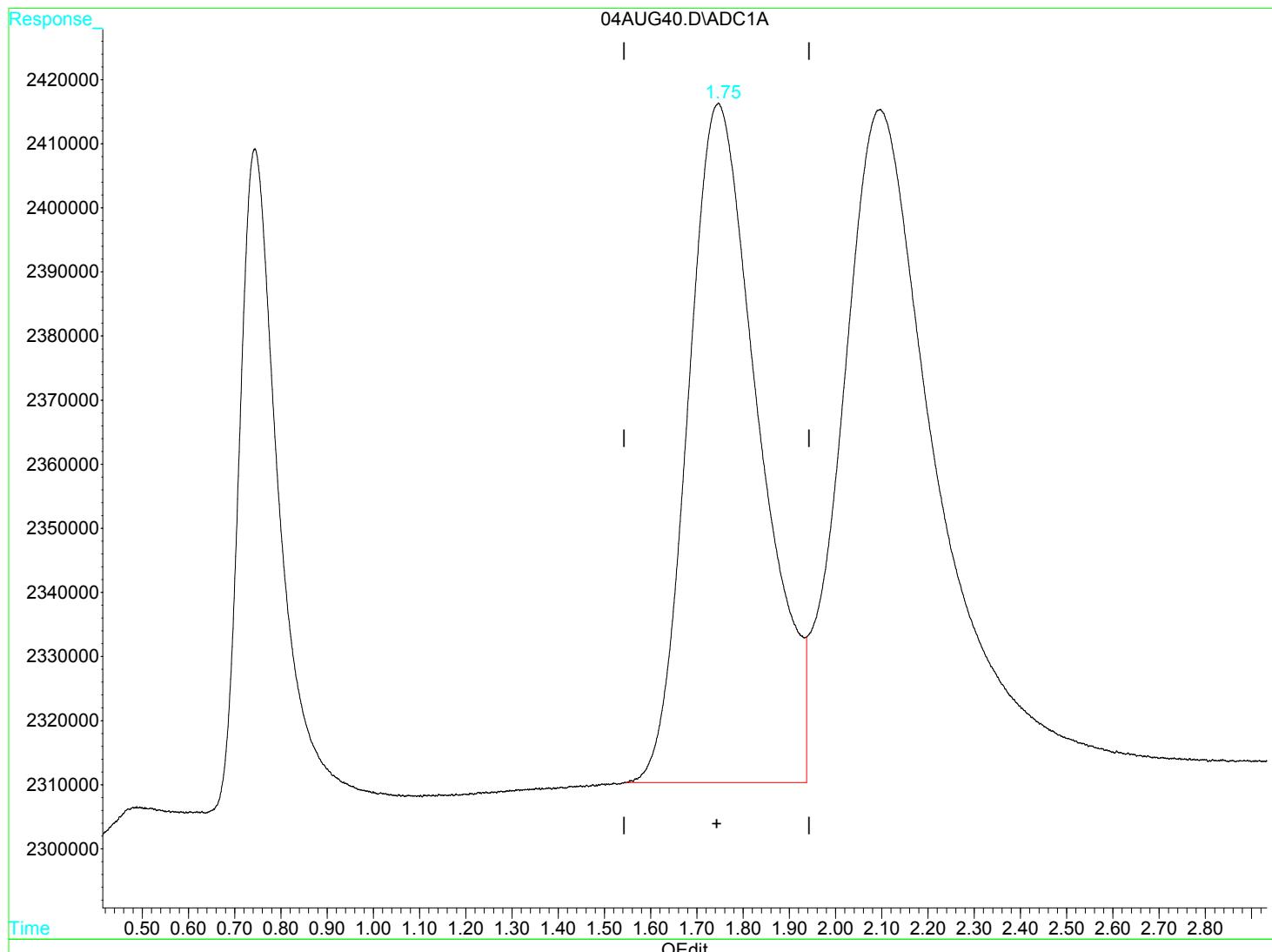
MSD1

BC Laboratories, Inc, Page 122 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG40.D Vial: 40
Acq On : 4 Aug 2017 2:31 pm Operator: JH2
Sample : 1713774-CCV5 Inst : GC-V1
Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 14:34 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(2) Ethene (m)

1.75min 28.092ug/L m

response 11306263

(+) = Expected Retention Time

04AUG40.D RSK175.M Mon Aug 07 09:19:01 2017

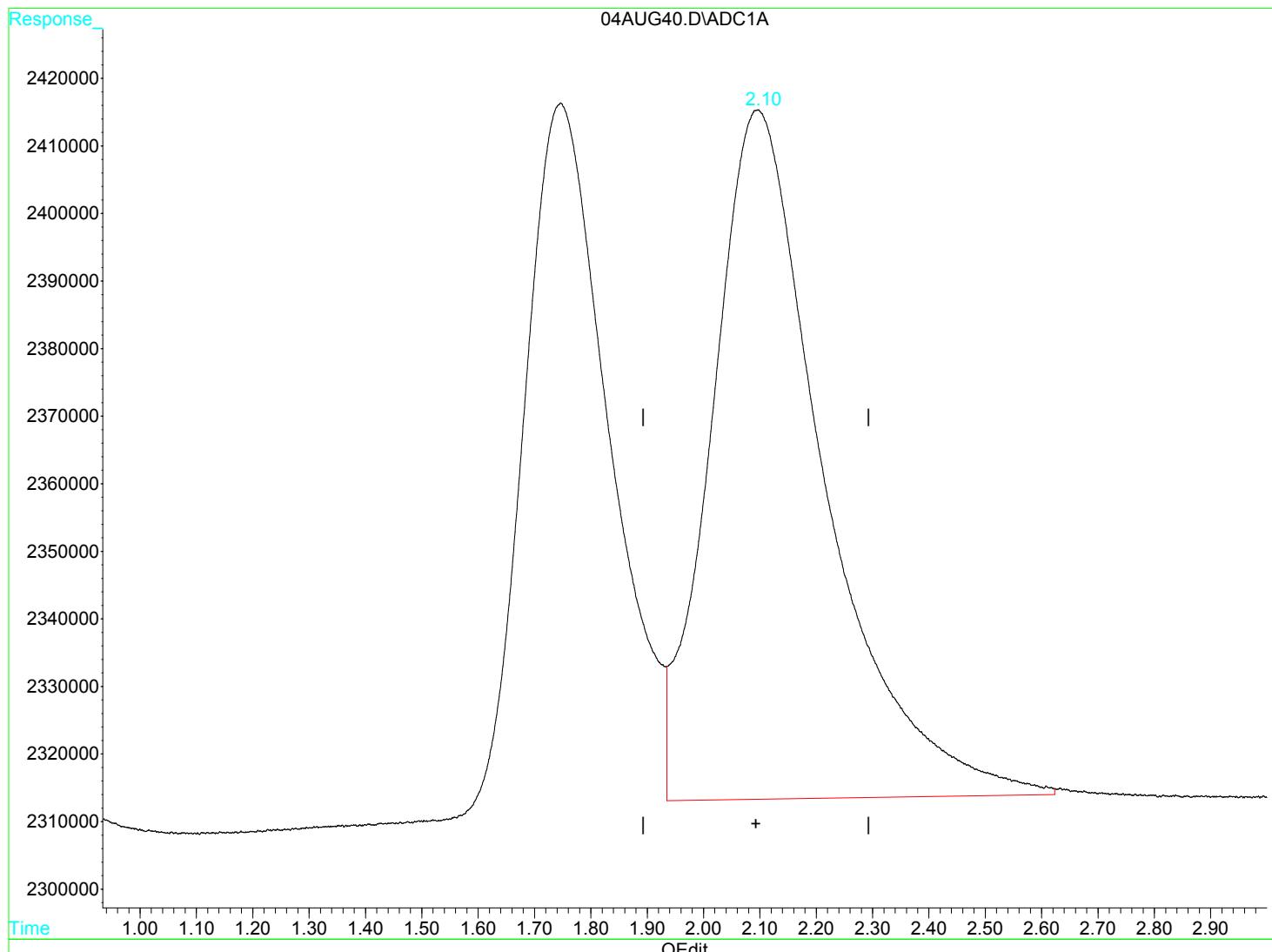
MSD1

BC Laboratories, Inc, Page 123 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG40.D Vial: 40
 Acq On : 4 Aug 2017 2:31 pm Operator: JH2
 Sample : 1713774-CCV5 Inst : GC-V1
 Misc : 1 RSK-175 250uL VOC-17-1061 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 14:34 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(3) Ethane (m)

2.10min 24.451ug/L m

response 14203787

(+) = Expected Retention Time

04AUG40.D RSK175.M Mon Aug 07 09:19:16 2017

MSD1

BC Laboratories, Inc, Page 124 of 925



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - CCB

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG03.D Vial: 3
Acq On : 4 Aug 2017 6:52 am Operator: JH2
Sample : 1713774-CCB1 Inst : GC-V1
Misc : 1 He 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 8:55 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units
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Target Compounds

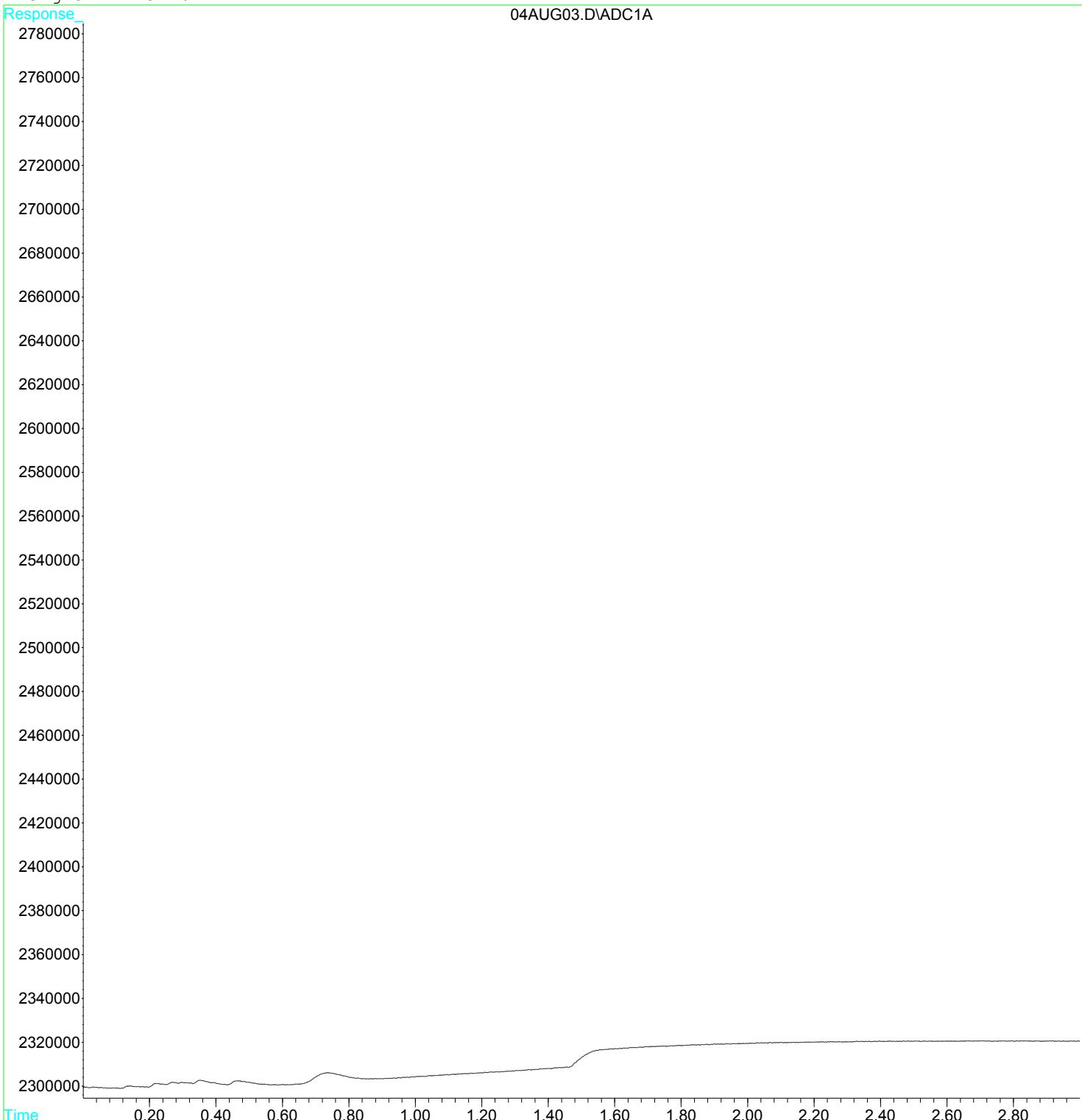
1) m Methane	0.00	0	N.D.	ug/L d
2) m Ethene	0.00	0	N.D.	ug/L d
3) m Ethane	0.00	0	N.D.	ug/L d

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG03.D Vial: 3
Acq On : 4 Aug 2017 6:52 am Operator: JH2
Sample : 1713774-CCB1 Inst : GC-V1
Misc : 1 He 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 8:55 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG11.D Vial: 11
Acq On : 4 Aug 2017 7:36 am Operator: JH2
Sample : 1713774-CCB2 Inst : GC-V1
Misc : 1 He 250uL1 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:03 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units
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Target Compounds

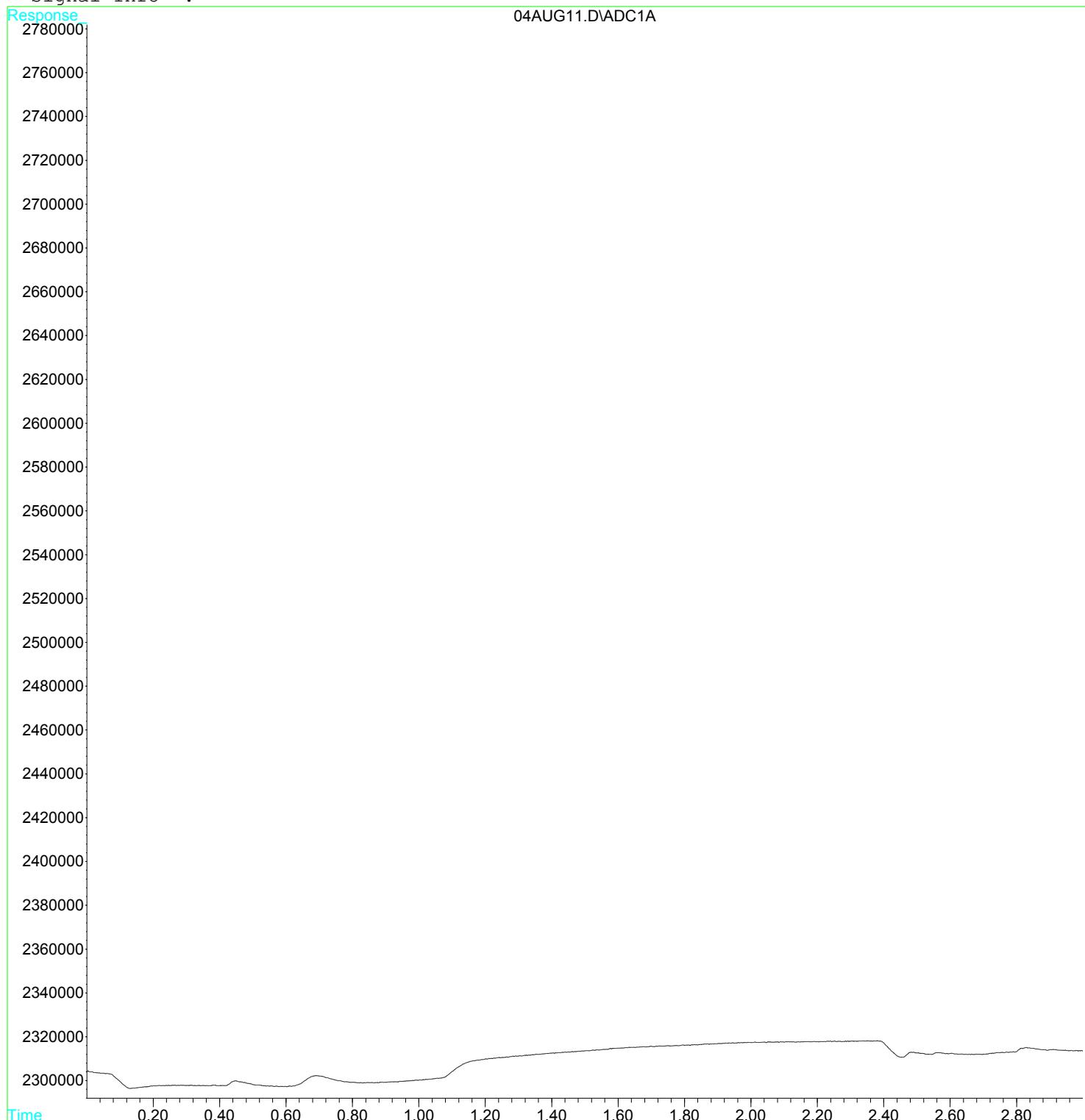
1) m Methane	0.00	0	N.D.	ug/L d
2) m Ethene	0.00	0	N.D.	ug/L d
3) m Ethane	0.00	0	N.D.	ug/L d

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG11.D Vial: 11
Acq On : 4 Aug 2017 7:36 am Operator: JH2
Sample : 1713774-CCB2 Inst : GC-V1
Misc : 1 He 250uL1 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:03 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG23.D Vial: 23
Acq On : 4 Aug 2017 10:36 am Operator: JH2
Sample : 1713774-CCB3 Inst : GC-V1
Misc : 1 He 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:10 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units
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Target Compounds

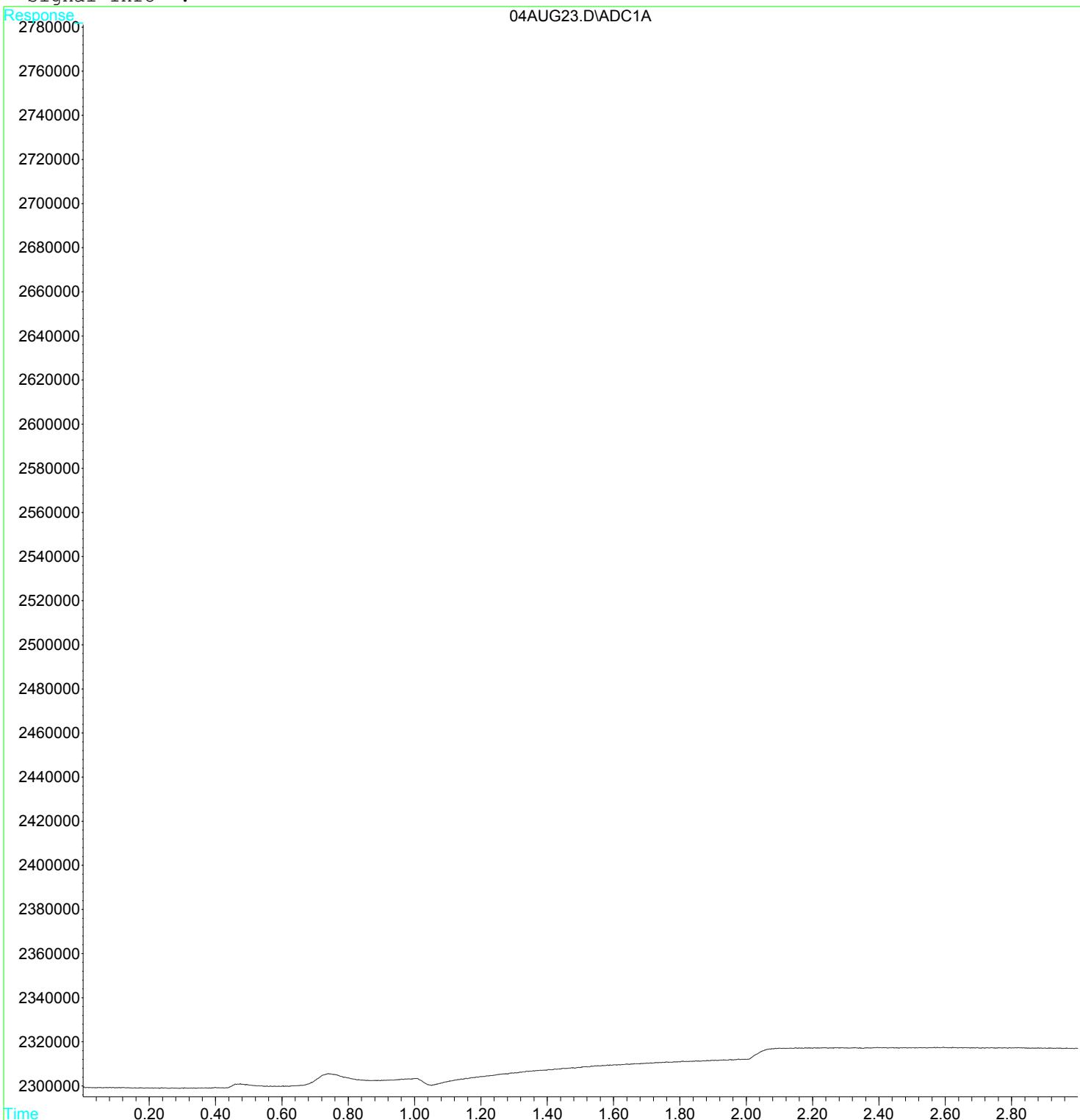
1) m Methane	0.00	0	N.D.	ug/L d
2) m Ethene	0.00	0	N.D.	ug/L d
3) m Ethane	0.00	0	N.D.	ug/L d

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG23.D Vial: 23
Acq On : 4 Aug 2017 10:36 am Operator: JH2
Sample : 1713774-CCB3 Inst : GC-V1
Misc : 1 He 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:10 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG35.D Vial: 35
Acq On : 4 Aug 2017 12:49 pm Operator: JH2
Sample : 1713774-CCB4 Inst : GC-V1
Misc : 1 He 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:17 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units
----------	------	----------	------	-------

Target Compounds

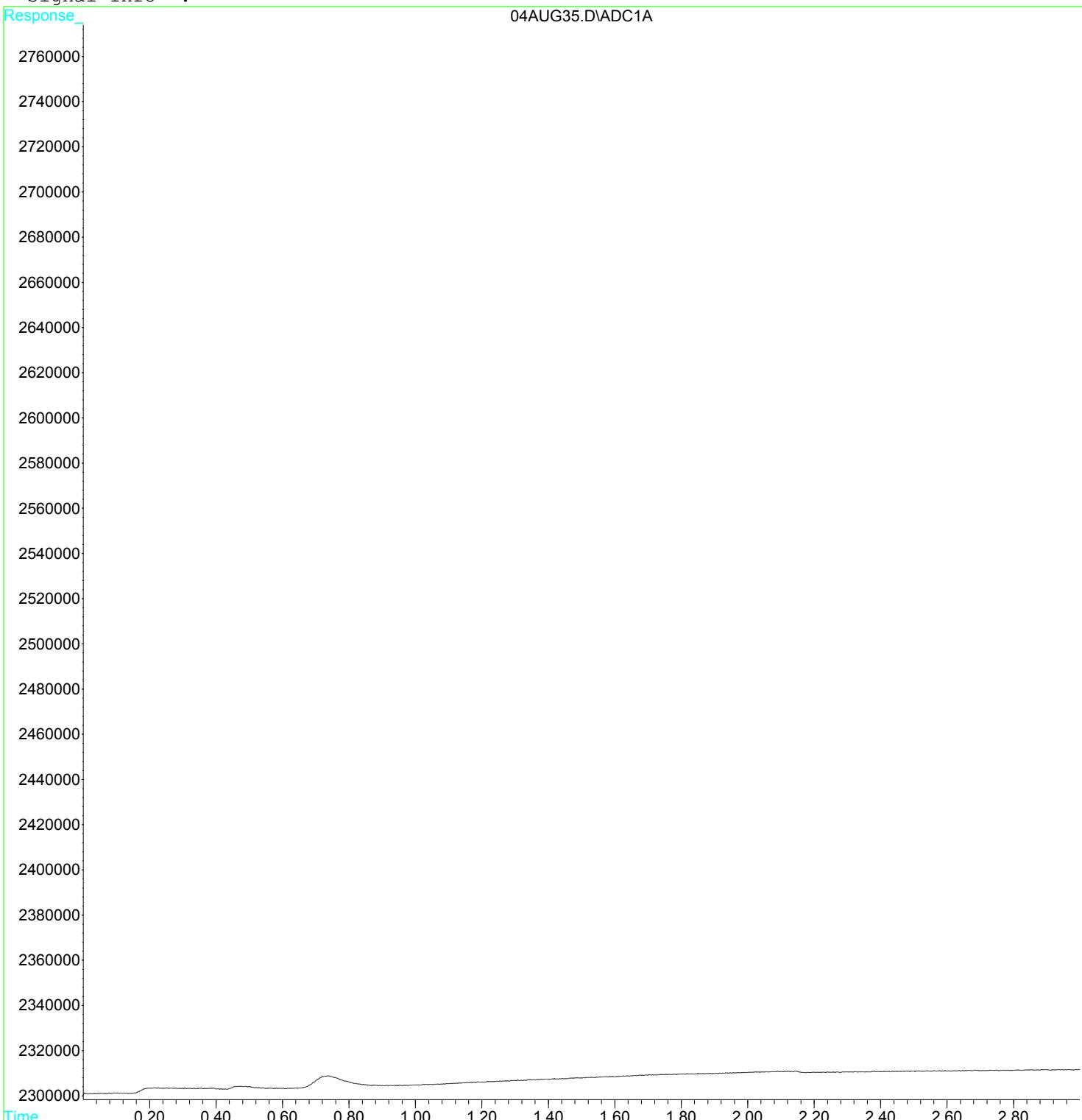
1) m Methane	0.00	0	N.D.	ug/L d
2) m Ethene	0.00	0	N.D.	ug/L d
3) m Ethane	0.00	0	N.D.	ug/L d

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG35.D Vial: 35
Acq On : 4 Aug 2017 12:49 pm Operator: JH2
Sample : 1713774-CCB4 Inst : GC-V1
Misc : 1 He 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:17 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG41.D Vial: 41
Acq On : 4 Aug 2017 2:39 pm Operator: JH2
Sample : 1713774-CCB5 Inst : GC-V1
Misc : 1 He 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:19 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units
----------	------	----------	------	-------

Target Compounds

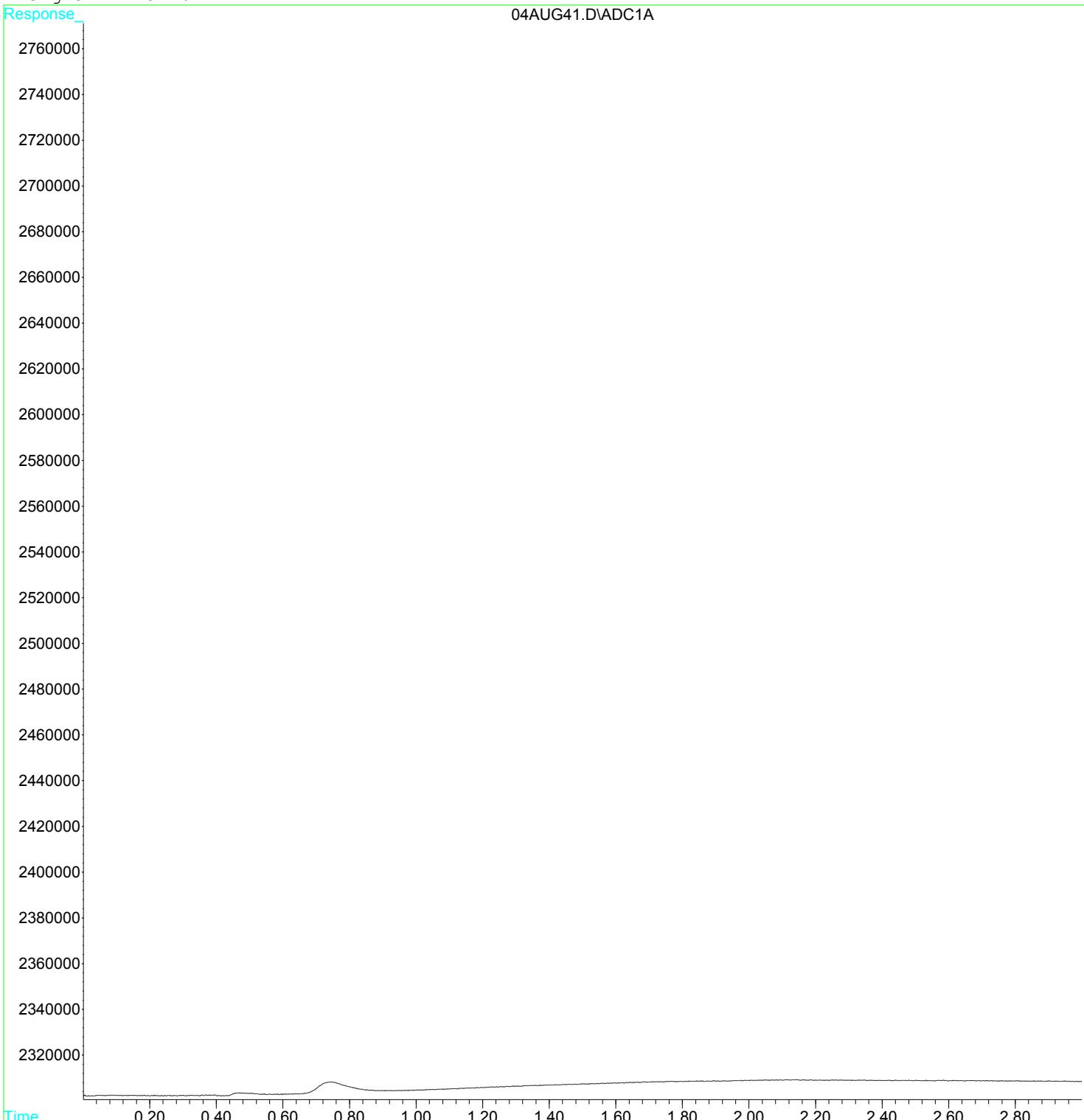
1) m Methane	0.00	0	N.D.	ug/L d
2) m Ethene	0.00	0	N.D.	ug/L d
3) m Ethane	0.00	0	N.D.	ug/L d

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG41.D Vial: 41
Acq On : 4 Aug 2017 2:39 pm Operator: JH2
Sample : 1713774-CCB5 Inst : GC-V1
Misc : 1 He 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 9:19 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :





Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Raw Data - Method Blank

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG04.D Vial: 4
Acq On : 4 Aug 2017 6:56 am Operator: JH2
Sample : B[H0355-BLK1] Inst : GC-V1
Misc : 1 He 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 8:57 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units
----------	------	----------	------	-------

Target Compounds

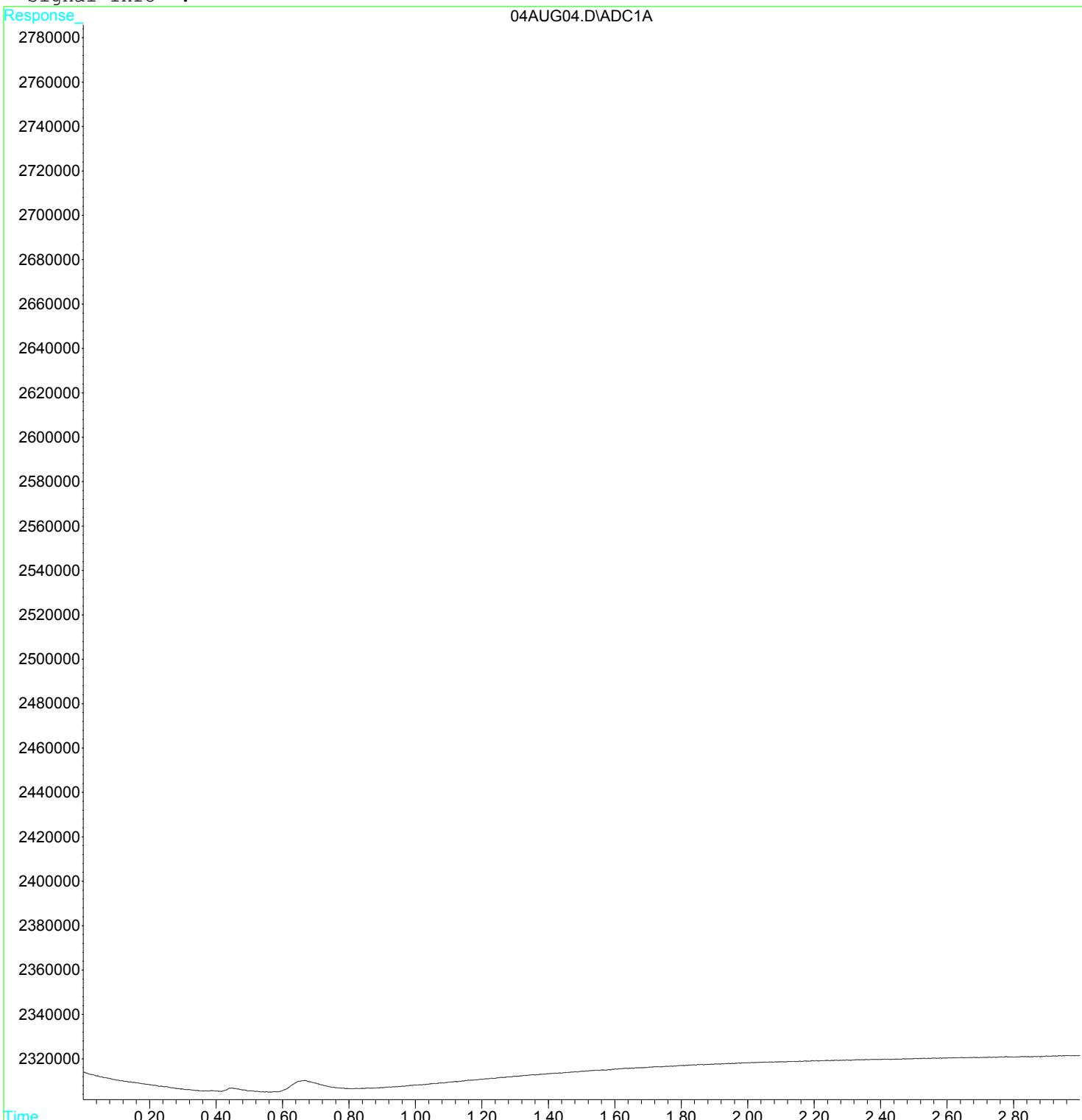
1) m Methane	0.00	0	N.D.	ug/L d
2) m Ethene	0.00	0	N.D.	ug/L d
3) m Ethane	0.00	0	N.D.	ug/L d

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG04.D Vial: 4
Acq On : 4 Aug 2017 6:56 am Operator: JH2
Sample : B[H0355-BLK1] Inst : GC-V1
Misc : 1 He 250uL Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 8:57 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :





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Raw Data - Lab Control Sample

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG05.D Vial: 5
Acq On : 4 Aug 2017 6:59 am Operator: JH2
Sample : B[H0355-BS1] Inst : GC-V1
Misc : 1 He RSK-175 250uL VOC-17-1064 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 8:57 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

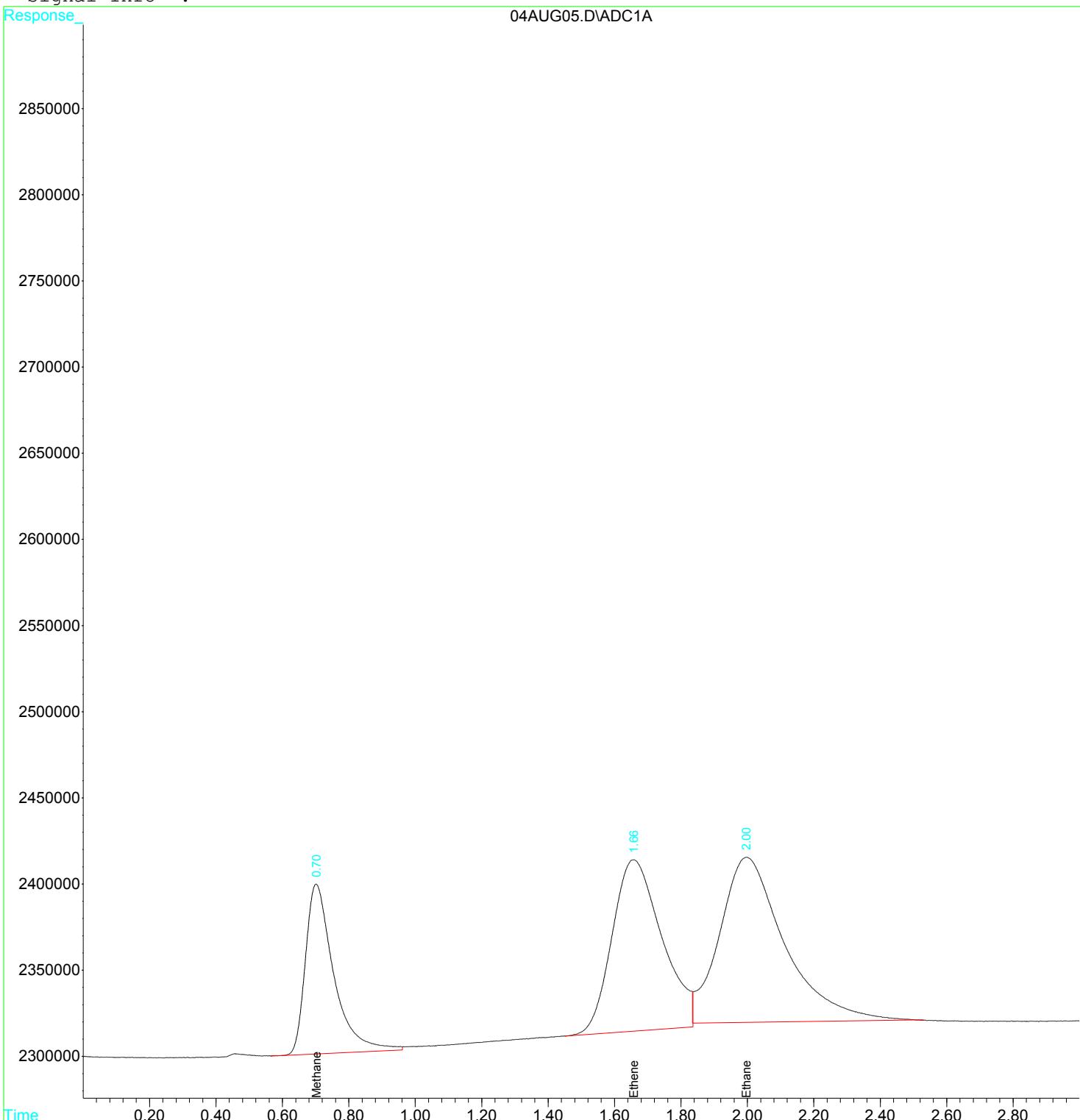
Compound	R.T.	Response	Conc	Units
<hr/>				
Target Compounds				
1) m Methane	0.70	5834453	9.6391	ug/L
2) m Ethene	1.66	10366786	25.7574	ug/L m
3) m Ethane	2.00	12975342	22.3362	ug/L m

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG05.D Vial: 5
Acq On : 4 Aug 2017 6:59 am Operator: JH2
Sample : B[H0355-BS1] Inst : GC-V1
Misc : 1 He RSK-175 250uL VOC-17-1064 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 8:57 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

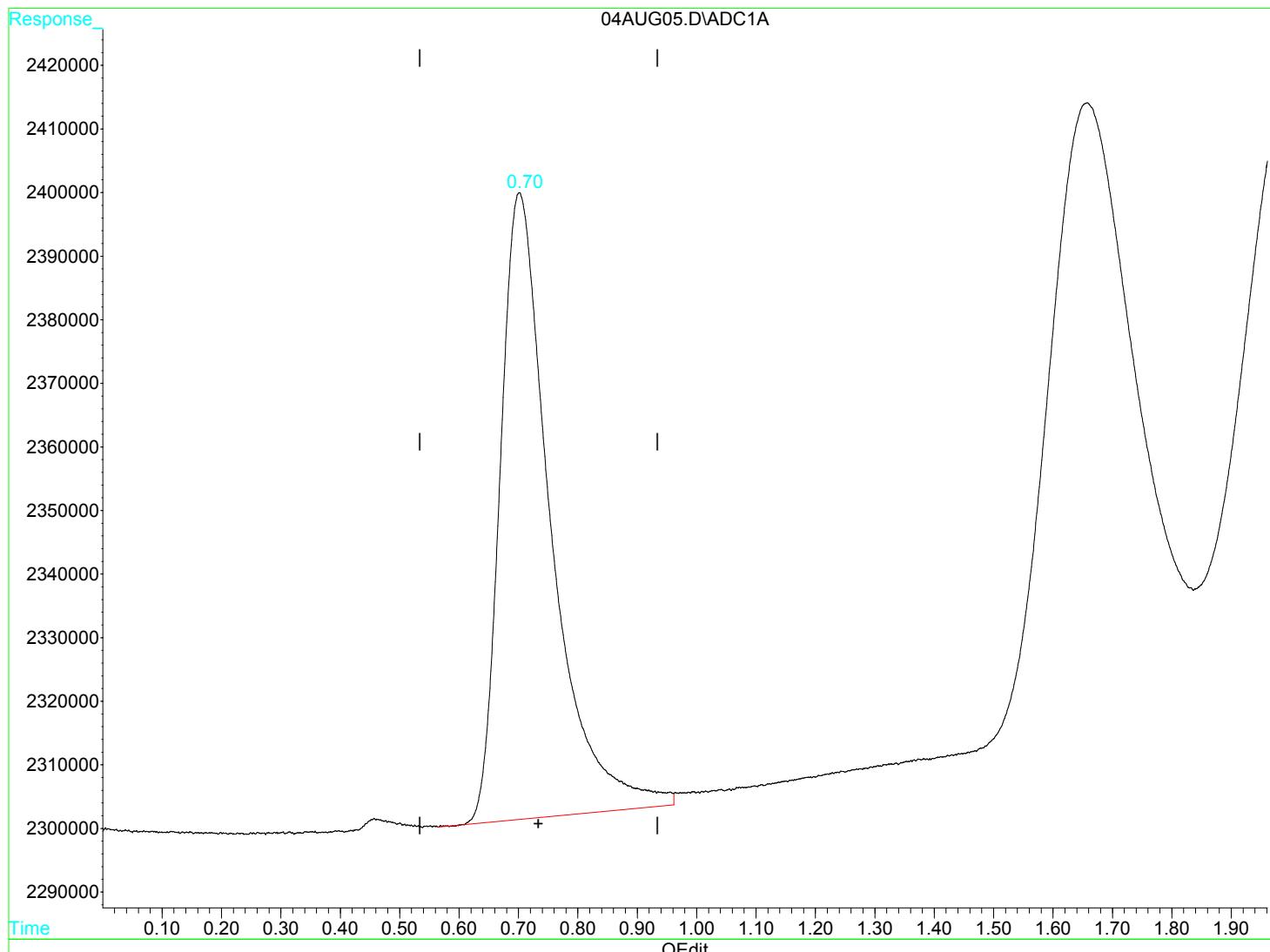
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG05.D Vial: 5
Acq On : 4 Aug 2017 6:59 am Operator: JH2
Sample : B[H0355-BS1] Inst : GC-V1
Misc : 1 He RSK-175 250uL VOC-17-1064 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 7:03 2017 Quant Results File: RSK175.RES

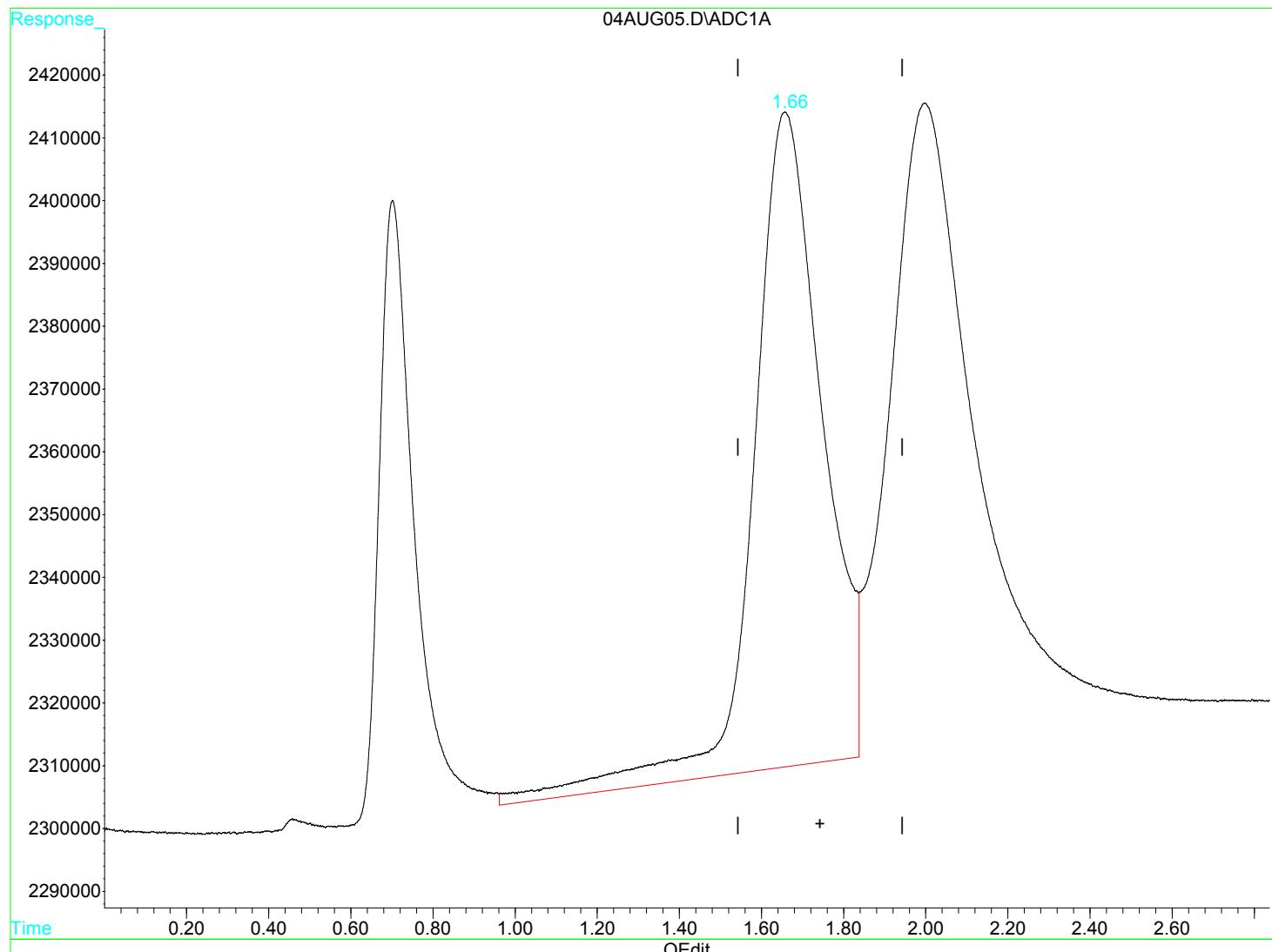
Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG05.D Vial: 5
Acq On : 4 Aug 2017 6:59 am Operator: JH2
Sample : B[H0355-BS1] Inst : GC-V1
Misc : 1 He RSK-175 250uL VOC-17-1064 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 7:03 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(2) Ethene (m)

1.66min 30.301ug/L

response 12195506

(+) = Expected Retention Time

04AUG05.D RSK175.M Mon Aug 07 08:57:25 2017

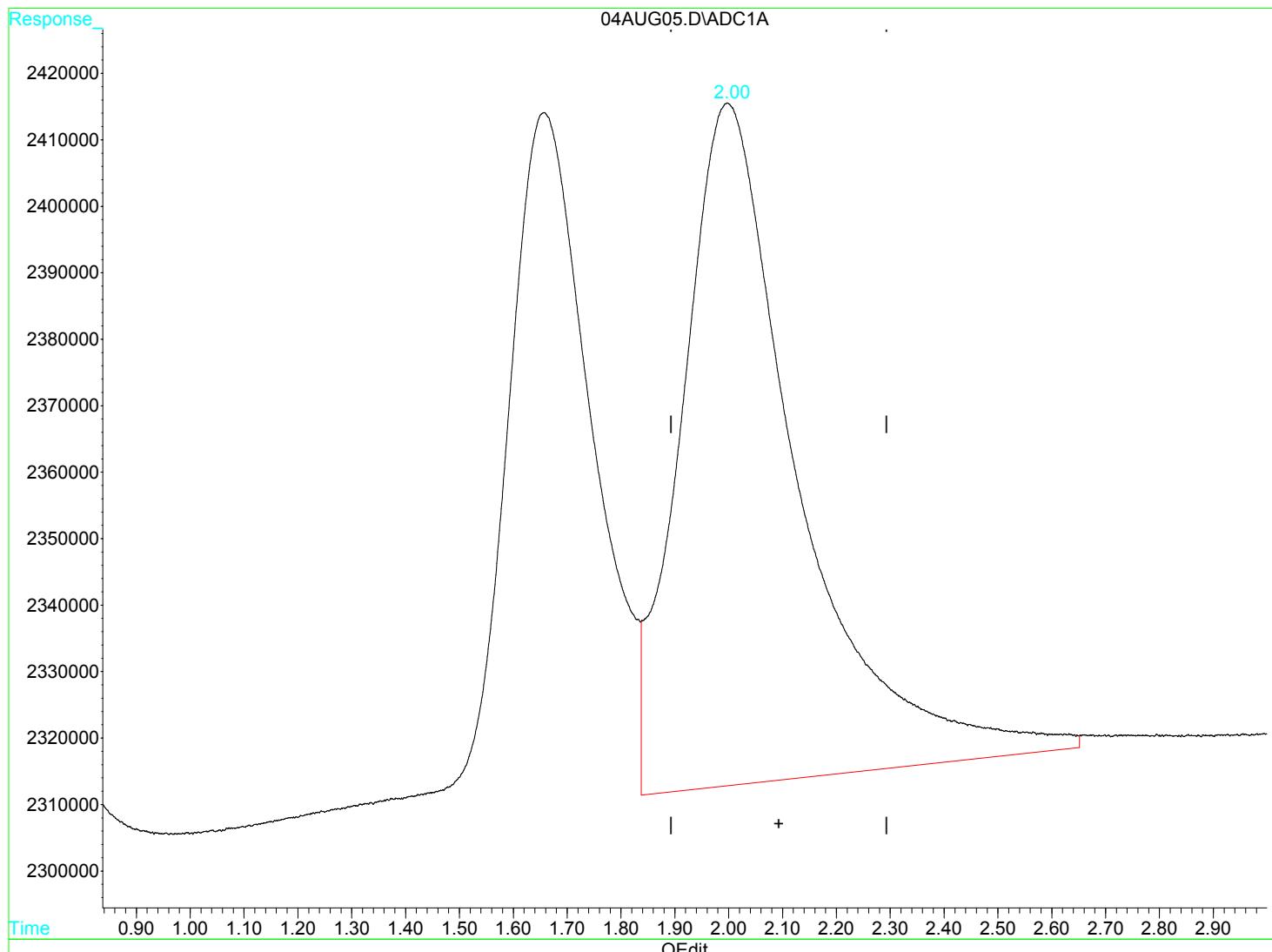
MSD1

BC Laboratories, Inc, Page 143 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG05.D Vial: 5
Acq On : 4 Aug 2017 6:59 am Operator: JH2
Sample : B[H0355-BS1] Inst : GC-V1
Misc : 1 He RSK-175 250uL VOC-17-1064 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 7:03 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(+) = Expected Retention Time

04AUG05.D RSK175.M Mon Aug 07 08:57:41 2017

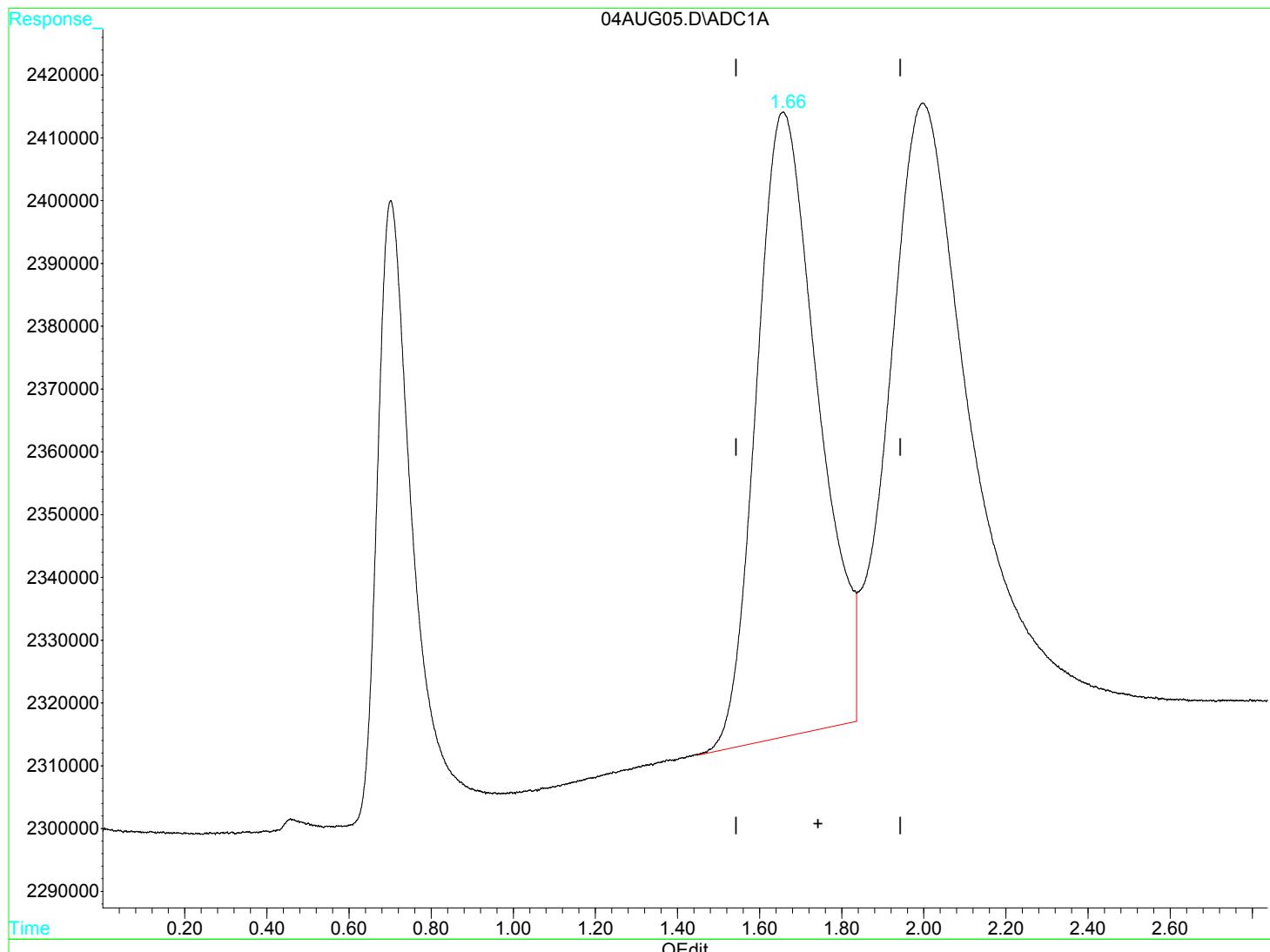
MSD1

BC Laboratories, Inc, Page 144 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG05.D Vial: 5
Acq On : 4 Aug 2017 6:59 am Operator: JH2
Sample : B[H0355-BS1] Inst : GC-V1
Misc : 1 He RSK-175 250uL VOC-17-1064 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 7:03 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(2) Ethene (m)

1.66min 25.757ug/L m

response 10366786

(+) = Expected Retention Time

04AUG05.D RSK175.M Mon Aug 07 08:57:33 2017

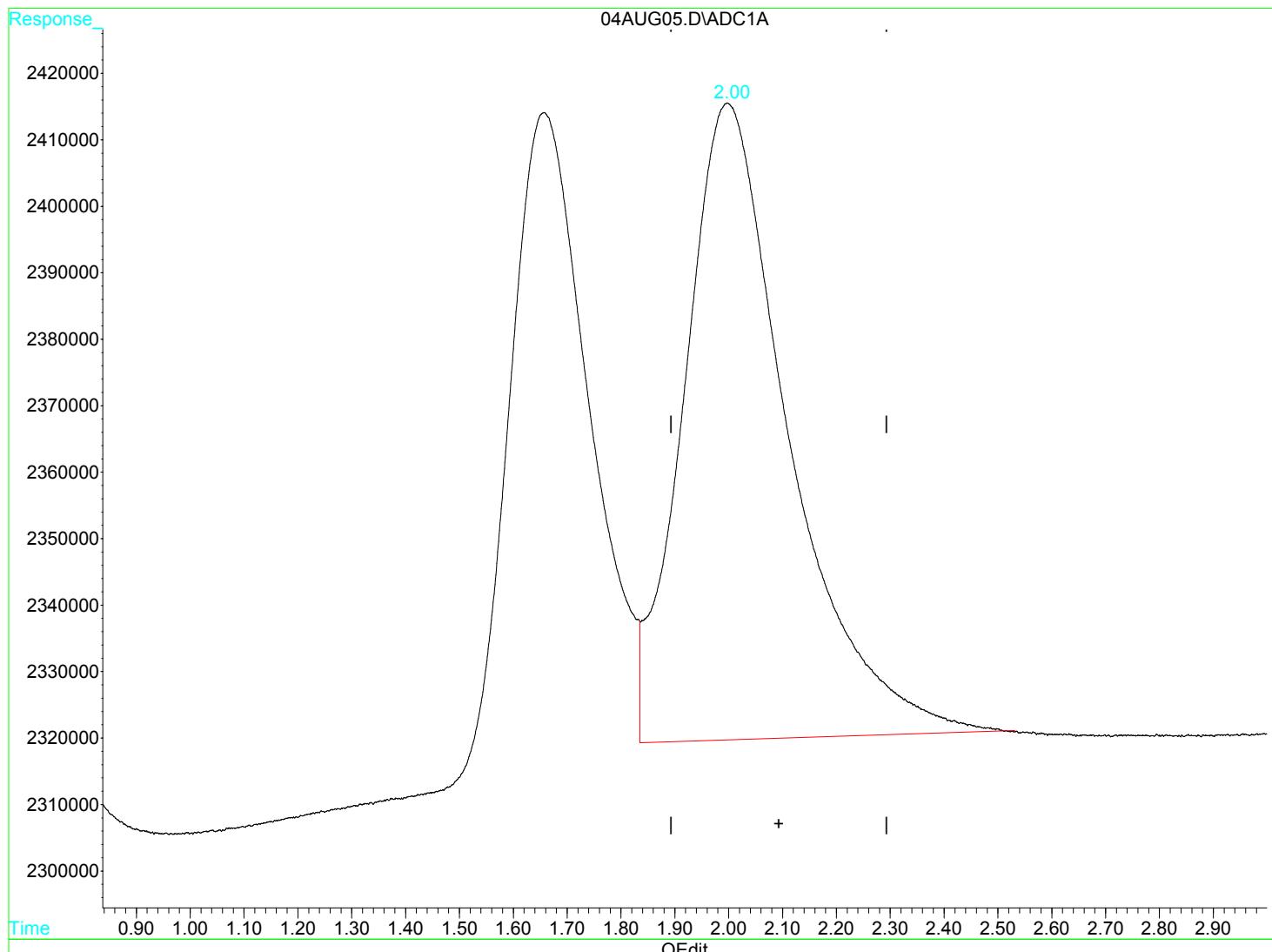
MSD1

BC Laboratories, Inc, Page 145 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG05.D Vial: 5
Acq On : 4 Aug 2017 6:59 am Operator: JH2
Sample : B[H0355-BS1] Inst : GC-V1
Misc : 1 He RSK-175 250uL VOC-17-1064 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 7:03 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration





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Raw Data - Lab Control Sample Duplicate

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG06.D Vial: 6
Acq On : 4 Aug 2017 7:04 am Operator: JH2
Sample : B[H0355-BSD1] Inst : GC-V1
Misc : 1 He RSK-175 250uL VOC-17-1064 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 8:59 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Initial Calibration
DataAcq Meth : RSK175.M

Volume Inj. :
Signal Phase :
Signal Info :

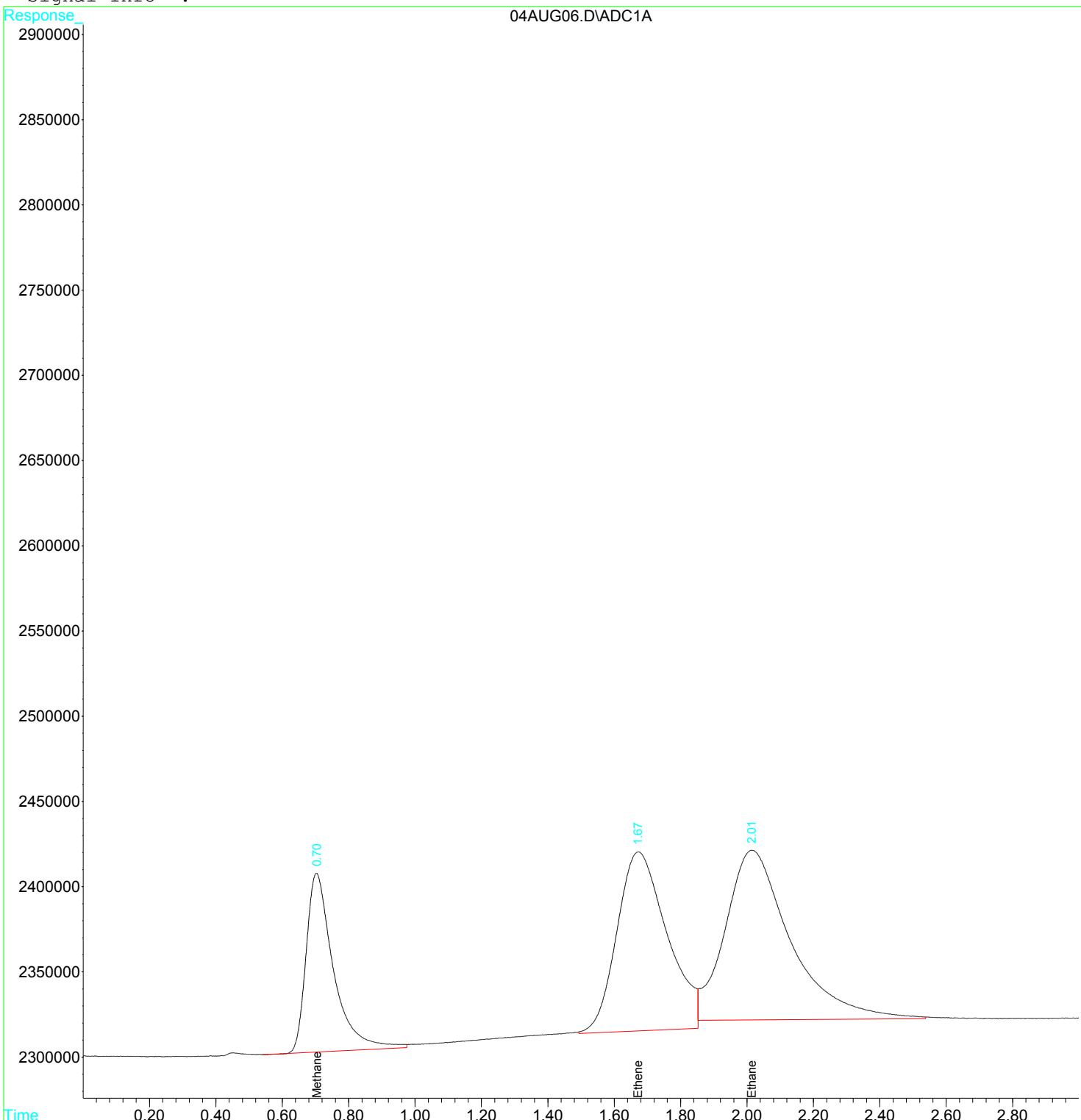
Compound	R.T.	Response	Conc	Units
<hr/>				
Target Compounds				
1) m Methane	0.70	5998188	9.9096	ug/L
2) m Ethene	1.67	11018777	27.3774	ug/L m
3) m Ethane	2.01	13596744	23.4059	ug/L m

Quantitation Report

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG06.D Vial: 6
Acq On : 4 Aug 2017 7:04 am Operator: JH2
Sample : B[H0355-BSD1] Inst : GC-V1
Misc : 1 He RSK-175 250uL VOC-17-1064 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 7 8:59 2017 Quant Results File: RSK175.RES

Quant Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration
DataAcq Meth : RSK175.M

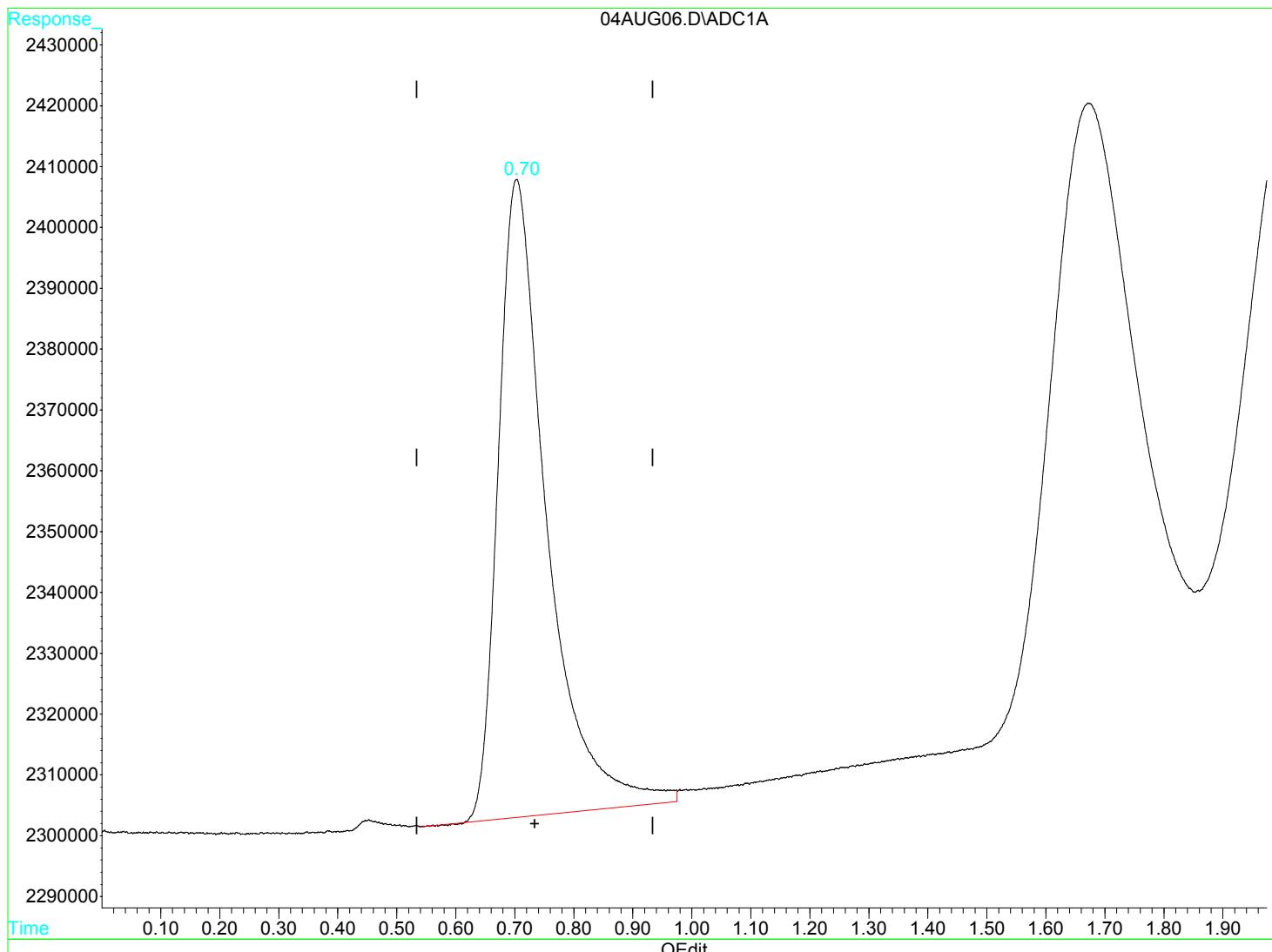
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG06.D Vial: 6
Acq On : 4 Aug 2017 7:04 am Operator: JH2
Sample : B[H0355-BSD1] Inst : GC-V1
Misc : 1 He RSK-175 250uL VOC-17-1064 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 7:07 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(1) Methane (m)

0.70min 9.910ug/L

response 5998188

(+) = Expected Retention Time

04AUG06.D RSK175.M Mon Aug 07 08:58:40 2017

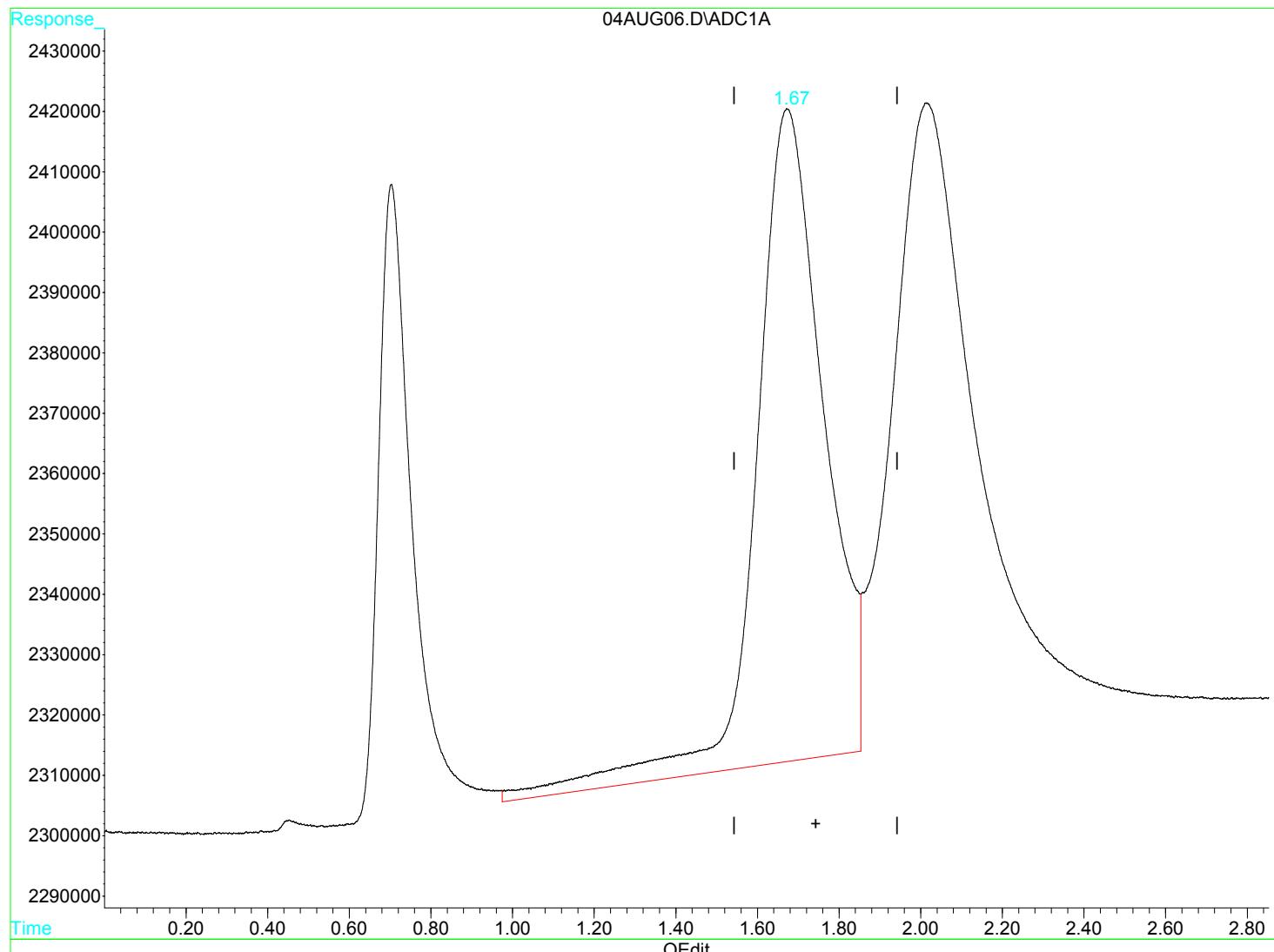
MSD1

BC Laboratories, Inc, Page 150 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG06.D Vial: 6
Acq On : 4 Aug 2017 7:04 am Operator: JH2
Sample : B[H0355-BSD1] Inst : GC-V1
Misc : 1 He RSK-175 250uL VOC-17-1064 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 7:07 2017 Quant Results File: RSK175.RES

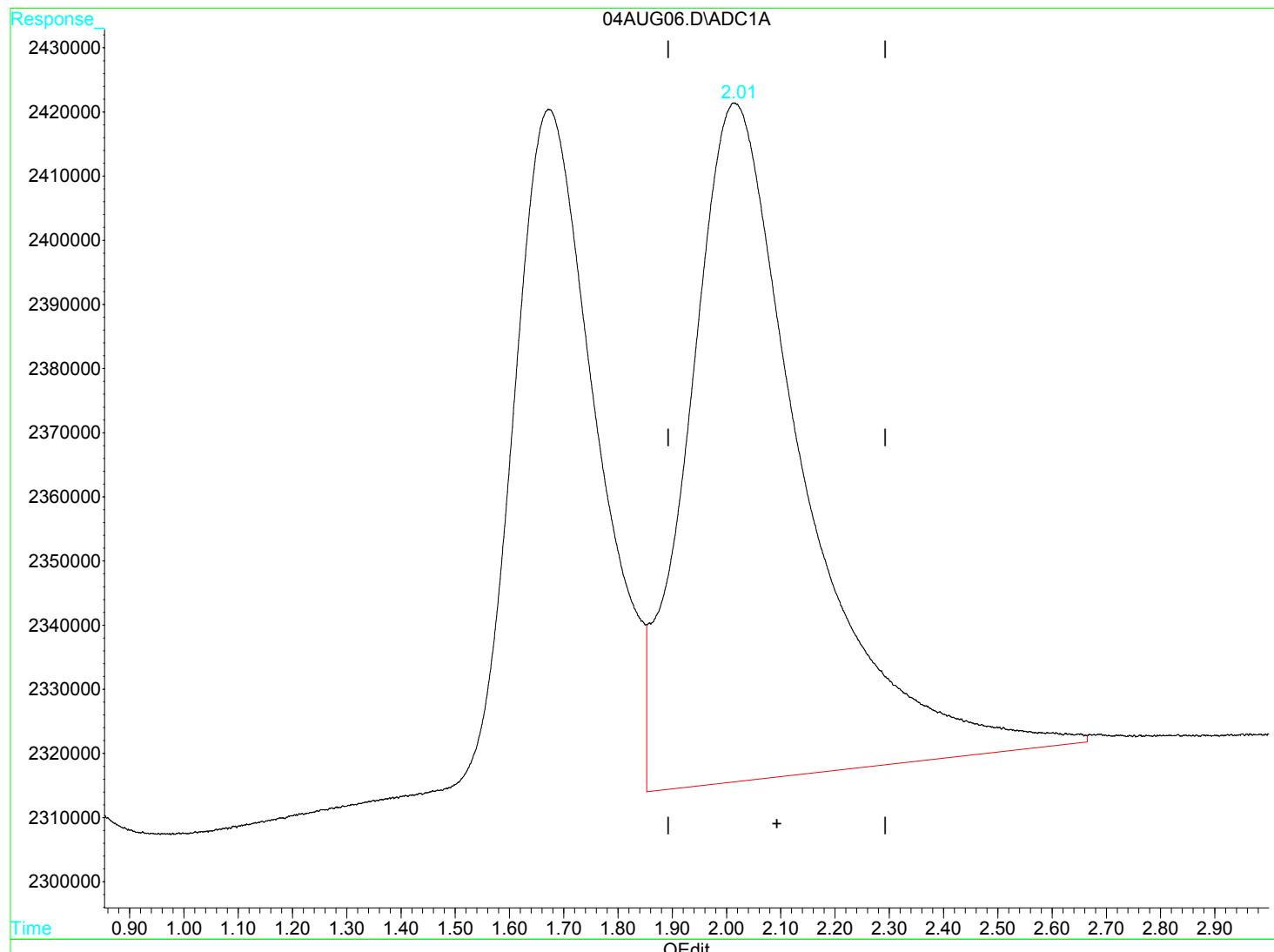
Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG06.D Vial: 6
 Acq On : 4 Aug 2017 7:04 am Operator: JH2
 Sample : B[H0355-BSD1] Inst : GC-V1
 Misc : 1 He RSK-175 250uL VOC-17-1064 Multiplr: 1.00
 IntFile : AUTOINT1.E
 Quant Time: Aug 4 7:07 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
 Title : RSK-175 Dissolved gases in water
 Last Update : Fri Jan 27 08:38:28 2017
 Response via : Multiple Level Calibration



(3) Ethane (m)

2.01min 27.089ug/L

response 15736614

(+) = Expected Retention Time

04AUG06.D RSK175.M Mon Aug 07 08:59:35 2017

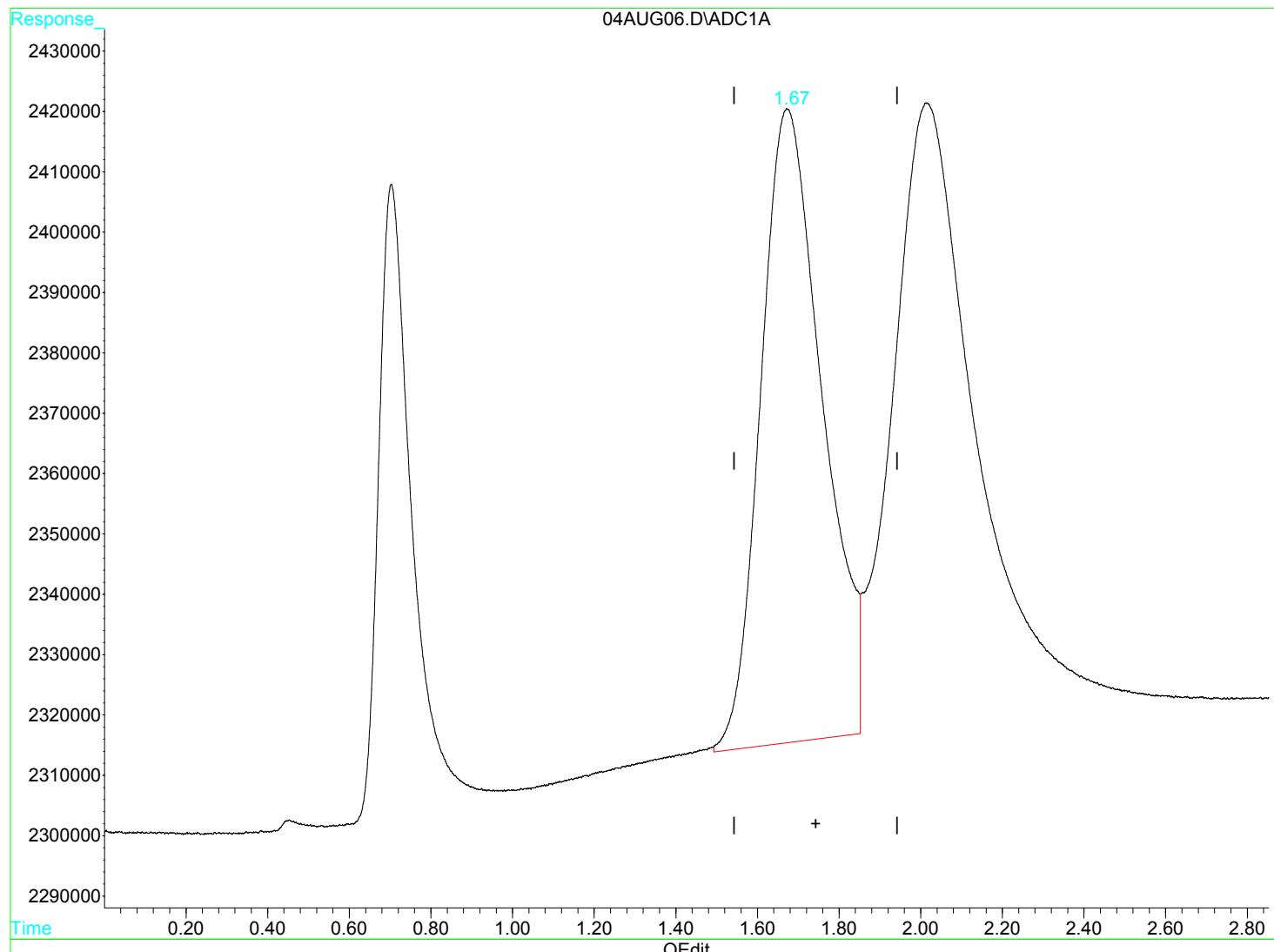
MSD1

BC Laboratories, Inc, Page 152 of 925

Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG06.D Vial: 6
Acq On : 4 Aug 2017 7:04 am Operator: JH2
Sample : B[H0355-BSD1] Inst : GC-V1
Misc : 1 He RSK-175 250uL VOC-17-1064 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 7:07 2017 Quant Results File: RSK175.RES

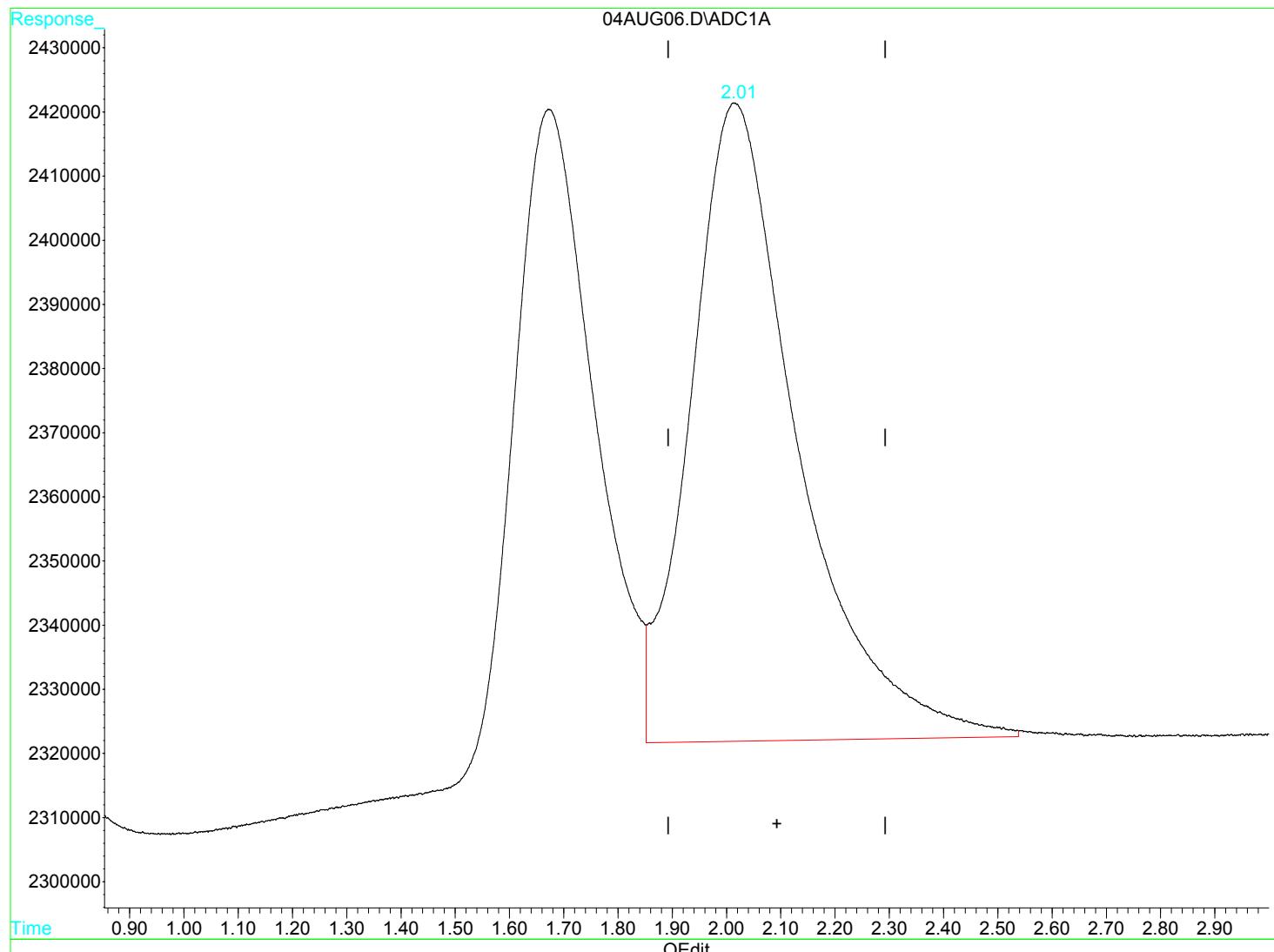
Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



Quantitation Report (Qedit)

Data File : D:\GC-V1\2017\AUG2017\AUG04\04AUG06.D Vial: 6
Acq On : 4 Aug 2017 7:04 am Operator: JH2
Sample : B[H0355-BSD1] Inst : GC-V1
Misc : 1 He RSK-175 250uL VOC-17-1064 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Aug 4 7:07 2017 Quant Results File: RSK175.RES

Method : C:\HPCHEM\3\METHODS\RSK175.M (Chemstation Integrator)
Title : RSK-175 Dissolved gases in water
Last Update : Fri Jan 27 08:38:28 2017
Response via : Multiple Level Calibration



(3) Ethane (m)

2.01min 23.406ug/L m

response 13596744

(+) = Expected Retention Time

04AUG06.D RSK175.M Mon Aug 07 08:59:42 2017

MSD1

BC Laboratories, Inc, Page 154 of 925



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Raw Data - Batch Information



PREPARATION BENCH SHEET

B[H0355]

BC Laboratories

Printed: 8/24/2017 10:33:44AM

Matrix: Water

Prepared using: Volatiles - GC - RSK-175M

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720228-01 E	gRSK175 Diss Methane	8/3/2017 3:07PM	JH2	1	1					
1720267-04 A	gmRSK175 Diss Methane, Ethai	8/3/2017 3:07PM	JH2	1	1					
1720267-08 A	gmRSK175 Diss Methane, Ethai	8/3/2017 3:07PM	JH2	1	1					
1720267-09 A	gmRSK175 Diss Methane, Ethai	8/3/2017 3:07PM	JH2	1	1					
1720267-10 A	gmRSK175 Diss Methane, Ethai	8/3/2017 3:07PM	JH2	1	1					
1720267-11 A	gmRSK175 Diss Methane, Ethai	8/3/2017 3:07PM	JH2	1	1					
B[H0355-BLK1]	QC	8/3/2017 3:07PM	JH2	1	1					
B[H0355-BS1]	QC	8/3/2017 3:07PM	JH2	1	1	7B07033			1000	
B[H0355-BSD1]	QC	8/3/2017 3:07PM	JH2	1	1	7B07033			1000	

Spike Mixes	Description	Solvent	Prepared	Expires
7B07033	RSK-175M Spike	Helium	1/27/2017 by zzzJacob Hernand	1/27/2018



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Raw Data - Sequence Information



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ANALYSIS SEQUENCE

1701454

Instrument: GC-V1
Calibration ID: 1702007

Sequence Date: 01/27/2017

Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1701454-CAL1	QC		1		7B07021		
1701454-CAL2	QC		2		7B07022		
1701454-CAL3	QC		3		7B07023		
1701454-CAL4	QC		4		7B07024		
1701454-ICV1	QC		5		7B07025		
1701454-ICB1	QC		6		7B07026		



ANALYSIS SEQUENCE

1713774

Instrument: GC-V1
Calibration ID: 1702007 Sequence Date: 08/04/2017 Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713774-ICV1	QC		1		7B07022		
1713774-ICB1	QC		2		7B07026		
1713774-CCV1	QC		3		7D17080		
1713774-CCB1	QC		4		6A07009		
B[H0355-BLK1]	QC		5				
B[H0355-BS1]	QC		6				
B[H0355-BSD1]	QC		7				
B[H0356-BLK1]	QC		8				
B[H0356-BS1]	QC		9				
B[H0356-BSD1]	QC		10				
1713774-CCV2	QC		11		7D17080		
1713774-CCB2	QC		12		6A07009		
1720228-01	gRSK175 Diss Methane	E	13				
1720352-01	gRSK175 Diss Methane	E	14				
1720353-01	gRSK175 Diss Methane	E	15				
1720267-04	gmRSK175 Diss Methane, Ethan	A	16				
1720267-08	gmRSK175 Diss Methane, Ethan	A	17				
1720267-09	gmRSK175 Diss Methane, Ethan	A	18				
1720267-10	gmRSK175 Diss Methane, Ethan	A	19				
1720267-11	gmRSK175 Diss Methane, Ethan	A	20				
1720313-05	gRSK175 Diss Methane, Ethane, l	A	21				
1720313-06	gRSK175 Diss Methane, Ethane, l	A	22				
1713774-CCV3	QC		23		7D17080		
1713774-CCB3	QC		24		6A07009		
1720313-07	gRSK175 Diss Methane, Ethane, l	A	25				
1720313-08	gRSK175 Diss Methane, Ethane, l	A	26				
1720313-09	gRSK175 Diss Methane, Ethane, l	A	27				
1720405-01	gmRSK175 Diss Methane, Ethan	A	28				
1720405-03	gmRSK175 Diss Methane, Ethan	A	29				
1720405-04	gmRSK175 Diss Methane, Ethan	A	30				
1720405-05	gmRSK175 Diss Methane, Ethan	A	31				
1720405-06	gmRSK175 Diss Methane, Ethan	A	32				
1720405-13	gmRSK175 Diss Methane, Ethan	A	33				
1720405-14	gmRSK175 Diss Methane, Ethan	A	34				
1713774-CCV4	QC		35		7D17080		
1713774-CCB4	QC		36		6A07009		
1720405-15	gmRSK175 Diss Methane, Ethan	A	37				
1720405-17	gmRSK175 Diss Methane, Ethan	A	38				
1713774-CCV5	QC		39		7D17080		



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

ANALYSIS SEQUENCE

1713774

Instrument: GC-V1
Calibration ID: 1702007 Sequence Date: 08/04/2017 Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713774-CCB5	QC		40		6A07009		



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG: 17-20267

Class: VOA

Method: EPA-8260B



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSES DATA PACKAGE COVER PAGE**EPA-8260B**

Laboratory: BC Laboratories

SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Client Sample Id:	Lab Sample Id:
<u>26PZ01_170724</u>	<u>1720267-01</u>
<u>26PZ02_170724</u>	<u>1720267-02</u>
<u>26PZ03_170724</u>	<u>1720267-03</u>
<u>27EW-01_170724</u>	<u>1720267-04</u>
<u>27EW-05_170724</u>	<u>1720267-05</u>
<u>27EW-19_170724</u>	<u>1720267-06</u>
<u>27EW-20_170724</u>	<u>1720267-07</u>
<u>27MW06_170724</u>	<u>1720267-08</u>
<u>27MW07_170724</u>	<u>1720267-09</u>
<u>27MW08_170724</u>	<u>1720267-10</u>
<u>27MW09_170724</u>	<u>1720267-11</u>
<u>S13-TT-MW02_170724</u>	<u>1720267-12</u>
<u>EB22_170724</u>	<u>1720267-13</u>
<u>EB23_170724</u>	<u>1720267-14</u>
<u>TB14_170724</u>	<u>1720267-15</u>

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature:

Name:

Sara Guron

Date:

08-24-2017

Title:

QA/QC Manager



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Matrix: Water

Instrument: MS-V5

Analyte	DL	LOD	LOQ	Units
Benzene	0.083	0.16	0.50	ug/L
Bromobenzene	0.13	0.16	0.50	ug/L
Bromochloromethane	0.24	0.30	1.0	ug/L
Bromodichloromethane	0.14	0.30	0.50	ug/L
Bromoform	0.27	0.30	0.60	ug/L
Bromomethane	0.25	0.25	0.60	ug/L
n-Butylbenzene	0.11	0.16	0.50	ug/L
sec-Butylbenzene	0.15	0.16	0.50	ug/L
tert-Butylbenzene	0.13	0.16	0.50	ug/L
Carbon tetrachloride	0.18	0.20	0.50	ug/L
Chlorobenzene	0.093	0.16	0.50	ug/L
Chloroethane	0.14	0.16	0.50	ug/L
Chloroform	0.12	0.16	0.50	ug/L
Chloromethane	0.14	0.16	0.50	ug/L
2-Chlorotoluene	0.20	0.20	0.50	ug/L
4-Chlorotoluene	0.15	0.16	0.50	ug/L
Dibromochloromethane	0.13	0.16	0.50	ug/L
1,2-Dibromo-3-chloropropane	0.44	0.50	1.0	ug/L
1,2-Dibromoethane	0.16	0.16	0.50	ug/L
Dibromomethane	0.24	0.30	1.0	ug/L
1,2-Dichlorobenzene	0.072	0.16	0.50	ug/L
1,3-Dichlorobenzene	0.15	0.16	0.50	ug/L
1,4-Dichlorobenzene	0.062	0.16	0.50	ug/L
Dichlorodifluoromethane	0.099	0.16	0.50	ug/L
1,1-Dichloroethane	0.11	0.16	0.50	ug/L
1,2-Dichloroethane	0.17	0.20	0.50	ug/L
1,1-Dichloroethene	0.18	0.20	0.50	ug/L
cis-1,2-Dichloroethene	0.085	0.16	0.50	ug/L
trans-1,2-Dichloroethene	0.15	0.16	0.50	ug/L
1,2-Dichloropropane	0.13	0.16	0.50	ug/L



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS**EPA-8260B**

Laboratory: BC Laboratories

SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Matrix: Water

Instrument: MS-V5

Analyte	DL	LOD	LOQ	Units
1,3-Dichloropropane	0.086	0.16	0.50	ug/L
2,2-Dichloropropane	0.13	0.16	0.50	ug/L
1,1-Dichloropropene	0.085	0.16	0.50	ug/L
cis-1,3-Dichloropropene	0.14	0.16	0.50	ug/L
trans-1,3-Dichloropropene	0.079	0.16	0.50	ug/L
Ethylbenzene	0.098	0.16	0.50	ug/L
Hexachlorobutadiene	0.17	0.20	0.50	ug/L
Isopropylbenzene	0.14	0.16	0.50	ug/L
p-Isopropyltoluene	0.12	0.16	0.50	ug/L
Methylene chloride	0.48	0.50	1.0	ug/L
Methyl t-butyl ether	0.11	0.16	0.50	ug/L
Naphthalene	0.36	0.40	0.50	ug/L
n-Propylbenzene	0.11	0.16	0.50	ug/L
Styrene	0.068	0.16	0.50	ug/L
1,1,1,2-Tetrachloroethane	0.18	0.20	0.50	ug/L
1,1,2,2-Tetrachloroethane	0.17	0.20	0.50	ug/L
Tetrachloroethene	0.13	0.16	0.50	ug/L
Toluene	0.093	0.16	0.50	ug/L
1,2,3-Trichlorobenzene	0.16	0.16	0.50	ug/L
1,2,4-Trichlorobenzene	0.19	0.20	0.50	ug/L
1,1,1-Trichloroethane	0.11	0.16	0.50	ug/L
1,1,2-Trichloroethane	0.16	0.16	0.50	ug/L
Trichloroethene	0.085	0.16	0.50	ug/L
Trichlorofluoromethane	0.13	0.16	0.50	ug/L
1,2,3-Trichloropropane	0.24	0.33	0.50	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane	0.15	0.16	0.50	ug/L
1,2,4-Trimethylbenzene	0.12	0.16	0.50	ug/L
1,3,5-Trimethylbenzene	0.12	0.16	0.50	ug/L
Vinyl chloride	0.12	0.16	0.50	ug/L
Total Xylenes	0.36	0.46	1.0	ug/L



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS EPA-8260B

Laboratory: BC Laboratories

SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Matrix: Water

Instrument: MS-V5

Analyte	DL	LOD	LOQ	Units
Acetone	4.6	5.0	10	ug/L
Acetonitrile	5.5	6.0	10	ug/L
Allyl chloride	0.80	1.0	5.0	ug/L
t-Amyl Methyl ether	0.25	0.30	0.50	ug/L
Benzyl chloride	0.60	0.60	1.0	ug/L
t-Butyl alcohol	9.4	10	12	ug/L
Carbon disulfide	0.38	0.40	1.0	ug/L
Chloroprene	0.37	1.0	5.0	ug/L
Diisopropyl ether	0.23	0.30	0.50	ug/L
Ethyl t-butyl ether	0.18	0.20	0.50	ug/L
2-Hexanone	3.4	4.0	10	ug/L
Methyl ethyl ketone	2.5	3.0	10	ug/L
Methyl isobutyl ketone	2.1	3.0	10	ug/L
Vinyl acetate	1.8	6.0	20	ug/L
p- & m-Xylenes	0.28	0.30	0.50	ug/L
o-Xylene	0.082	0.16	0.50	ug/L



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

26PZ01_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-01</u>
Sampled:	<u>07/24/17 11:16</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.20	0.083	0.16	0.50	J
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.19	0.11	0.16	0.50	J
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	J
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	1.5	0.085	0.16	0.50	
156-60-5	trans-1,2-Dichloroethene	1	2.2	0.15	0.16	0.50	
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

26PZ01_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>					
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>					
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-01</u>		File ID:	<u>28JUL51.D</u>		
Sampled:	<u>07/24/17 11:16</u>	Prepared:	<u>07/28/17 07:00</u>		Analyzed:	<u>07/29/17 02:40</u>		
Solids:			Preparation:	<u>EPA 5030 Water MS</u>		Initial/Final:	<u>25 ml / 25 ml</u>	
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>		Calibration:	<u>1707017</u>		Instrument: <u>MS-V5</u>
CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q	
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U	
100-41-4	Ethylbenzene	1	0.20	0.098	0.16	0.50	J	
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U	
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U	
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U	
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U	
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U	
91-20-3	Naphthalene	1	0.74	0.36	0.40	0.50		
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U	
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U	
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U	
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U	
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U	
108-88-3	Toluene	1	0.22	0.093	0.16	0.50	J	
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U	
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U	
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U	
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U	
79-01-6	Trichloroethene	1	0.16	0.085	0.16	0.50	U	
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U	
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U	
95-63-6	1,2,4-Trimethylbenzene	1	0.68	0.12	0.16	0.50		
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U	
75-01-4	Vinyl chloride	1	0.74	0.12	0.16	0.50		
67-64-1	Acetone	1	5.0	4.6	5.0	10	U	
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U	
75-65-0	t-Butyl alcohol	1	10	9.4	10	12	U	
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U	
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U	
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U	
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U	
179601-23-1	p- & m-Xylenes	1	0.35	0.28	0.30	0.50	J	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET
EPA-8260B

26PZ01_170724

Laboratory:	<u>BC Laboratories</u>		SDG:	<u>17-20267</u>			
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>		Project:	<u>Alameda</u>			
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-01</u>		File ID:	<u>28JUL51.D</u>	
Sampled:	<u>07/24/17 11:16</u>	Prepared:	<u>07/28/17 07:00</u>		Analyzed:	<u>07/29/17 02:40</u>	
Solids:			Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>	
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>	Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.34	0.082	0.16	0.50	J

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	11.770	118	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.7200	97.2	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	10.500	105	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	159665	6.57	177616	6.57	
Chlorobenzene-d5 (IS)	65236	9.61	72072	9.62	
1,4-Difluorobenzene (IS)	237447	7.38	263542	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

26PZ02_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>					
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>					
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-02</u>					<u>28JUL52.D</u>
Sampled:	<u>07/24/17 10:23</u>	Prepared:	<u>07/28/17 07:00</u>					<u>07/29/17 03:03</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>					Initial/Final: <u>25 ml / 25 ml</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>	Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>	
CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q	
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U	
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U	
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U	
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U	
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U	
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U	
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U	
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	J	
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U	
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U	
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U	
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U	
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U	
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U	
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U	
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U	
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U	
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U	
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U	
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U	
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U	
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U	
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U	
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U	
75-34-3	1,1-Dichloroethane	1	1.1	0.11	0.16	0.50		
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U	
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U	
156-59-2	cis-1,2-Dichloroethene	1	0.80	0.085	0.16	0.50		
156-60-5	trans-1,2-Dichloroethene	1	0.25	0.15	0.16	0.50	J	
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U	
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U	
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
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Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

26PZ02_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>					
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>					
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-02</u>		File ID:	<u>28JUL52.D</u>		
Sampled:	<u>07/24/17 10:23</u>	Prepared:	<u>07/28/17 07:00</u>		Analyzed:	<u>07/29/17 03:03</u>		
Solids:			Preparation:	<u>EPA 5030 Water MS</u>		Initial/Final:	<u>25 ml / 25 ml</u>	
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>		Calibration:	<u>1707017</u>		Instrument: <u>MS-V5</u>
CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q	
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U	
100-41-4	Ethylbenzene	1	0.90	0.098	0.16	0.50		
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U	
98-82-8	Isopropylbenzene	1	0.36	0.14	0.16	0.50	J	
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U	
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U	
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U	
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U	
103-65-1	n-Propylbenzene	1	0.44	0.11	0.16	0.50	J	
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U	
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U	
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U	
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U	
108-88-3	Toluene	1	0.24	0.093	0.16	0.50	J	
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U	
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U	
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U	
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U	
79-01-6	Trichloroethene	1	0.42	0.085	0.16	0.50	J	
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U	
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U	
95-63-6	1,2,4-Trimethylbenzene	1	2.6	0.12	0.16	0.50		
108-67-8	1,3,5-Trimethylbenzene	1	0.27	0.12	0.16	0.50	J	
75-01-4	Vinyl chloride	1	0.46	0.12	0.16	0.50	J	
67-64-1	Acetone	1	5.0	4.6	5.0	10	U	
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U	
75-65-0	t-Butyl alcohol	1	10	9.4	10	12	U	
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U	
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U	
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U	
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U	
179601-23-1	p- & m-Xylenes	1	1.9	0.28	0.30	0.50		



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET EPA-8260B

26PZ02_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-02</u>
Sampled:	<u>07/24/17 10:23</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	2.1	0.082	0.16	0.50	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.790	108	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.7600	97.6	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.5100	95.1	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	152256	6.58	177616	6.57	
Chlorobenzene-d5 (IS)	64061	9.61	72072	9.62	
1,4-Difluorobenzene (IS)	220797	7.38	263542	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET EPA-8260B

26PZ03_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-03</u>
Sampled:	<u>07/24/17 12:05</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	2.0	0.083	0.16	0.50	
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.23	0.17	0.20	0.50	J
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	3.6	0.085	0.16	0.50	
156-60-5	trans-1,2-Dichloroethene	1	5.1	0.15	0.16	0.50	
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.19	0.086	0.16	0.50	J
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

26PZ03_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>					
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>					
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-03</u>		File ID:	<u>28JUL53.D</u>		
Sampled:	<u>07/24/17 12:05</u>	Prepared:	<u>07/28/17 07:00</u>		Analyzed:	<u>07/29/17 03:26</u>		
Solids:		Preparation:	<u>EPA 5030 Water MS</u>		Initial/Final:	<u>25 ml / 25 ml</u>		
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>	Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>	
CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q	
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U	
100-41-4	Ethylbenzene	1	0.40	0.098	0.16	0.50	J	
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U	
98-82-8	Isopropylbenzene	1	0.75	0.14	0.16	0.50		
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U	
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U	
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U	
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U	
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U	
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U	
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U	
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U	
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U	
108-88-3	Toluene	1	0.20	0.093	0.16	0.50	J	
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U	
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U	
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U	
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U	
79-01-6	Trichloroethene	1	0.16	0.085	0.16	0.50	U	
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U	
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U	
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U	
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U	
75-01-4	Vinyl chloride	1	5.2	0.12	0.16	0.50		
67-64-1	Acetone	1	5.0	4.6	5.0	10	U	
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U	
75-65-0	t-Butyl alcohol	1	10	9.4	10	12	U	
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U	
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U	
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U	
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U	
179601-23-1	p- & m-Xylenes	1	1.0	0.28	0.30	0.50		



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET
EPA-8260B

26PZ03_170724

Laboratory:	<u>BC Laboratories</u>		SDG:	<u>17-20267</u>			
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>		Project:	<u>Alameda</u>			
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-03</u>		File ID:	<u>28JUL53.D</u>	
Sampled:	<u>07/24/17 12:05</u>	Prepared:	<u>07/28/17 07:00</u>		Analyzed:	<u>07/29/17 03:26</u>	
Solids:		Preparation:	<u>EPA 5030 Water MS</u>		Initial/Final:	<u>25 ml / 25 ml</u>	
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>	Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	1.9	0.082	0.16	0.50	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.870	109	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.8700	98.7	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	10.180	102	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	159704	6.58	177616	6.57	
Chlorobenzene-d5 (IS)	65025	9.61	72072	9.62	
1,4-Difluorobenzene (IS)	237414	7.38	263542	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-01_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>					
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>					
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-04</u>					<u>28JUL54.D</u>
Sampled:	<u>07/24/17 13:45</u>	Prepared:	<u>07/28/17 07:00</u>					<u>07/29/17 03:49</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>					Initial/Final: <u>25 ml / 25 ml</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>	Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>	
CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q	
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U	
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U	
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U	
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U	
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U	
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U	
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U	
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U	
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U	
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U	
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U	
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U	
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U	
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U	
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U	
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U	
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U	
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U	
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U	
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U	
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U	
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U	
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U	
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U	
75-34-3	1,1-Dichloroethane	1	0.58	0.11	0.16	0.50		
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U	
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U	
156-59-2	cis-1,2-Dichloroethene	1	17	0.085	0.16	0.50		
156-60-5	trans-1,2-Dichloroethene	1	2.6	0.15	0.16	0.50		
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U	
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U	
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-01_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-04</u>
Sampled:	<u>07/24/17 13:45</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.68	0.085	0.16	0.50	
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	7.7	0.12	0.16	0.50	
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	12	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET EPA-8260B

27EW-01_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-04</u>
Sampled:	<u>07/24/17 13:45</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	9.7500	97.5	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.9100	99.1	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.7400	97.4	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	165003	6.57	177616	6.57	
Chlorobenzene-d5 (IS)	65921	9.61	72072	9.62	
1,4-Difluorobenzene (IS)	238536	7.38	263542	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-05_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>					
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>					
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-05</u>					<u>28JUL55.D</u>
Sampled:	<u>07/24/17 11:45</u>	Prepared:	<u>07/28/17 07:00</u>					<u>07/29/17 04:12</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>					Initial/Final: <u>25 ml / 25 ml</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>	Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>	
CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q	
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U	
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U	
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U	
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U	
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U	
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U	
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U	
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U	
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U	
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U	
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U	
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U	
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U	
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U	
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U	
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U	
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U	
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U	
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U	
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U	
95-50-1	1,2-Dichlorobenzene	1	0.28	0.072	0.16	0.50	J	
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U	
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	J	
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U	
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U	
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U	
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U	
156-59-2	cis-1,2-Dichloroethene	1	2.7	0.085	0.16	0.50		
156-60-5	trans-1,2-Dichloroethene	1	0.26	0.15	0.16	0.50	J	
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U	
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U	
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-05_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>					
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>					
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-05</u>					<u>28JUL55.D</u>
Sampled:	<u>07/24/17 11:45</u>	Prepared:	<u>07/28/17 07:00</u>					<u>07/29/17 04:12</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>					Initial/Final: <u>25 ml / 25 ml</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>	Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>	
CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q	
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U	
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U	
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U	
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U	
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U	
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U	
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U	
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U	
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U	
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U	
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U	
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U	
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U	
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U	
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U	
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U	
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U	
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U	
79-01-6	Trichloroethene	1	1.0	0.085	0.16	0.50		
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U	
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U	
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U	
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U	
75-01-4	Vinyl chloride	1	0.23	0.12	0.16	0.50	J	
67-64-1	Acetone	1	5.0	4.6	5.0	10	U	
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U	
75-65-0	t-Butyl alcohol	1	10	9.4	10	12	U	
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U	
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U	
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U	
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U	
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET EPA-8260B

27EW-05_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-05</u>
Sampled:	<u>07/24/17 11:45</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	9.4300	94.3	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.7300	97.3	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.5000	95.0	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	165950	6.58	177616	6.57	
Chlorobenzene-d5 (IS)	64429	9.61	72072	9.62	
1,4-Difluorobenzene (IS)	242355	7.38	263542	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-19_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-06</u>
Sampled:	<u>07/24/17 09:09</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.20	0.072	0.16	0.50	J
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	1.1	0.085	0.16	0.50	
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-19_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-06</u>
Sampled:	<u>07/24/17 09:09</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	1.1	0.085	0.16	0.50	
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	12	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET EPA-8260B

27EW-19_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-06</u>
Sampled:	<u>07/24/17 09:09</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.220	102	81 - 118	
Toluene-d8 (Surrogate)	10.000	10.020	100	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.9300	99.3	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	157773	6.57	177616	6.57	
Chlorobenzene-d5 (IS)	61476	9.62	72072	9.62	
1,4-Difluorobenzene (IS)	230486	7.38	263542	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-20_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>					
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>					
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-07</u>					<u>28JUL57.D</u>
Sampled:	<u>07/24/17 14:00</u>	Prepared:	<u>07/28/17 07:00</u>					<u>07/29/17 04:58</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>					Initial/Final: <u>25 ml / 25 ml</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>	Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>	
CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q	
71-43-2	Benzene	1	0.49	0.083	0.16	0.50	J	
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U	
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U	
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U	
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U	
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U	
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U	
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U	
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U	
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U	
108-90-7	Chlorobenzene	1	51	0.093	0.16	0.50		
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U	
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U	
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U	
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U	
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U	
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U	
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U	
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U	
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U	
95-50-1	1,2-Dichlorobenzene	1	5.8	0.072	0.16	0.50		
541-73-1	1,3-Dichlorobenzene	1	0.18	0.15	0.16	0.50	J	
106-46-7	1,4-Dichlorobenzene	1	1.3	0.062	0.16	0.50		
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U	
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U	
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U	
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U	
156-59-2	cis-1,2-Dichloroethene	1	4.0	0.085	0.16	0.50		
156-60-5	trans-1,2-Dichloroethene	1	1.6	0.15	0.16	0.50		
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U	
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U	
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27EW-20_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>					
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>					
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-07</u>					<u>28JUL57.D</u>
Sampled:	<u>07/24/17 14:00</u>	Prepared:	<u>07/28/17 07:00</u>					<u>07/29/17 04:58</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>					Initial/Final: <u>25 ml / 25 ml</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>	Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>	
CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q	
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U	
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U	
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U	
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U	
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U	
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U	
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U	
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U	
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U	
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U	
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U	
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U	
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U	
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U	
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U	
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U	
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U	
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U	
79-01-6	Trichloroethene	1	0.53	0.085	0.16	0.50		
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U	
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U	
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U	
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U	
75-01-4	Vinyl chloride	1	5.3	0.12	0.16	0.50		
67-64-1	Acetone	1	5.0	4.6	5.0	10	U	
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U	
75-65-0	t-Butyl alcohol	1	10	9.4	10	12	U	
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U	
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U	
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U	
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U	
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET EPA-8260B

27EW-20_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-07</u>
Sampled:	<u>07/24/17 14:00</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.160	102	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.6700	96.7	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.9400	99.4	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	156138	6.57	177616	6.57	
Chlorobenzene-d5 (IS)	58613	9.61	72072	9.62	
1,4-Difluorobenzene (IS)	229047	7.38	263542	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET EPA-8260B

27MW06_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-08</u>
Sampled:	<u>07/24/17 09:00</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27MW06_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-08</u>
Sampled:	<u>07/24/17 09:00</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.33	0.085	0.16	0.50	J
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	12	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET EPA-8260B

27MW06_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-08</u>
Sampled:	<u>07/24/17 09:00</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.590	106	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.6500	96.5	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.6900	96.9	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	157522	6.57	177616	6.57	
Chlorobenzene-d5 (IS)	61874	9.61	72072	9.62	
1,4-Difluorobenzene (IS)	236211	7.38	263542	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27MW07_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>					
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>					
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-09</u>		File ID:	<u>28JUL59.D</u>		
Sampled:	<u>07/24/17 10:30</u>	Prepared:	<u>07/28/17 07:00</u>		Analyzed:	<u>07/29/17 05:44</u>		
Solids:			Preparation:	<u>EPA 5030 Water MS</u>		Initial/Final:	<u>25 ml / 25 ml</u>	
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>		Calibration:	<u>1707017</u>		Instrument: <u>MS-V5</u>
CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q	
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U	
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U	
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U	
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U	
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U	
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U	
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U	
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U	
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U	
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U	
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U	
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U	
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U	
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U	
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U	
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U	
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U	
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U	
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U	
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U	
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U	
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U	
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U	
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U	
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U	
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U	
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U	
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U	
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U	
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U	
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U	
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET EPA-8260B

27MW07_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-09</u>
Sampled:	<u>07/24/17 10:30</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	12	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET EPA-8260B

27MW07_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-09</u>
Sampled:	<u>07/24/17 10:30</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.340	103	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.7600	97.6	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.3500	93.5	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	159882	6.58	177616	6.57	
Chlorobenzene-d5 (IS)	63321	9.61	72072	9.62	
1,4-Difluorobenzene (IS)	238644	7.38	263542	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27MW08_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>					
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>					
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-10</u>		File ID:	<u>28JUL67.D</u>		
Sampled:	<u>07/24/17 08:20</u>	Prepared:	<u>07/28/17 07:00</u>		Analyzed:	<u>07/29/17 08:48</u>		
Solids:			Preparation:	<u>EPA 5030 Water MS</u>		Initial/Final:	<u>25 ml / 25 ml</u>	
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>		Calibration:	<u>1707017</u>		Instrument: <u>MS-V5</u>
CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q	
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U	
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U	
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U	
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U	
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U	
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U	
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U	
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U	
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U	
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U	
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U	
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U	
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U	
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U	
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U	
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U	
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U	
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U	
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U	
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U	
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U	
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U	
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U	
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U	
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U	
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U	
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U	
156-59-2	cis-1,2-Dichloroethene	1	0.41	0.085	0.16	0.50	J	
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U	
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U	
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U	
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27MW08_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-10</u>
Sampled:	<u>07/24/17 08:20</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.16	0.085	0.16	0.50	J
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	12	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET EPA-8260B

27MW08_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-10</u>
Sampled:	<u>07/24/17 08:20</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.270	103	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.6500	96.5	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.6600	96.6	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	145509	6.58	162953	6.57	
Chlorobenzene-d5 (IS)	56923	9.61	64183	9.62	
1,4-Difluorobenzene (IS)	211349	7.38	237313	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

27MW09_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>					
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>					
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-11</u>		File ID:	<u>28JUL60.D</u>		
Sampled:	<u>07/24/17 12:55</u>	Prepared:	<u>07/28/17 07:00</u>		Analyzed:	<u>07/29/17 06:07</u>		
Solids:		Preparation:	<u>EPA 5030 Water MS</u>		Initial/Final:	<u>25 ml / 25 ml</u>		
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>		Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>
CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q	
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U	
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U	
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U	
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U	
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U	
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U	
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U	
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U	
98-06-6	tert-Butylbenzene	1	7.6	0.13	0.16	0.50		
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U	
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U	
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U	
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U	
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U	
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U	
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U	
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U	
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U	
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U	
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U	
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U	
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U	
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U	
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U	
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U	
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U	
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U	
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U	
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U	
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U	
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U	
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET EPA-8260B

27MW09_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-11</u>
Sampled:	<u>07/24/17 12:55</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.59	0.14	0.16	0.50	
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.24	0.12	0.16	0.50	J
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	12	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



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Project: Alameda
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Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET EPA-8260B

27MW09_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-11</u>
Sampled:	<u>07/24/17 12:55</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.410	104	81 - 118	
Toluene-d8 (Surrogate)	10.000	10.080	101	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.9000	99.0	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	159751	6.57	177616	6.57	
Chlorobenzene-d5 (IS)	62913	9.61	72072	9.62	
1,4-Difluorobenzene (IS)	232620	7.38	263542	7.38	

* Values outside of QC limits



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Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET EPA-8260B

S13-TT-MW02_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-12</u>
Sampled:	<u>07/24/17 09:55</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.640	106	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.6300	96.3	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.5300	95.3	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	159019	6.57	162953	6.57	
Chlorobenzene-d5 (IS)	62697	9.62	64183	9.62	
1,4-Difluorobenzene (IS)	231425	7.38	237313	7.38	

* Values outside of QC limits



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ORGANIC ANALYSIS DATA SHEET EPA-8260B

EB22_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-13</u>
Sampled:	<u>07/24/17 14:05</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



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ORGANIC ANALYSIS DATA SHEET EPA-8260B

EB22_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-13</u>
Sampled:	<u>07/24/17 14:05</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
		Instrument:	<u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	12	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



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ORGANIC ANALYSIS DATA SHEET EPA-8260B

EB22_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-13</u>
Sampled:	<u>07/24/17 14:05</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.600	106	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.6100	96.1	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.9600	99.6	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	155506	6.57	162953	6.57	
Chlorobenzene-d5 (IS)	61496	9.62	64183	9.62	
1,4-Difluorobenzene (IS)	233178	7.38	237313	7.38	

* Values outside of QC limits



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9210 Sky Park Court #200
San Diego, CA 92123

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Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

EB23_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>					
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>					
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-14</u>					File ID: <u>28JUL70.D</u>
Sampled:	<u>07/24/17 14:00</u>	Prepared:	<u>07/28/17 07:00</u>					Analyzed: <u>07/29/17 09:57</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>					Initial/Final: <u>25 ml / 25 ml</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>	Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>	
CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q	
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U	
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U	
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U	
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U	
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U	
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U	
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U	
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U	
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U	
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U	
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U	
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U	
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U	
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U	
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U	
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U	
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U	
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U	
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U	
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U	
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U	
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U	
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U	
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U	
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U	
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U	
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U	
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U	
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U	
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U	
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U	
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U	



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ORGANIC ANALYSIS DATA SHEET EPA-8260B

EB23_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-14</u>
Sampled:	<u>07/24/17 14:00</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	12	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET EPA-8260B

EB23_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-14</u>
Sampled:	<u>07/24/17 14:00</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.500	105	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.7500	97.5	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.4800	94.8	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	171202	6.58	162953	6.57	
Chlorobenzene-d5 (IS)	69440	9.62	64183	9.62	
1,4-Difluorobenzene (IS)	247958	7.38	237313	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET

EPA-8260B

TB14_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-15</u>
Sampled:	<u>07/24/17 14:00</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	1	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	1	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	1	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	1	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	1	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	1	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	1	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	1	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	1	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	1	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	1	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	1	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	1	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	1	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	1	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	1	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	1	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	1	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	1	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.16	0.099	0.16	0.50	U
75-34-3	1,1-Dichloroethane	1	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	1	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	1	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	1	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	1	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	1	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	1	0.16	0.13	0.16	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET EPA-8260B

TB14_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-15</u>
Sampled:	<u>07/24/17 14:00</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
		Instrument:	<u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
563-58-6	1,1-Dichloropropene	1	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	1	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	1	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	1	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	1	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	1	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	1	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	1	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	1	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	1	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	1	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	1	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	1	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.20	0.19	0.20	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	1	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	1	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	1	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	1	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	1	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	1	10	9.4	10	12	U
75-15-0	Carbon disulfide	1	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	1	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	1	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	1	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	1	0.30	0.28	0.30	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ORGANIC ANALYSIS DATA SHEET
EPA-8260B

TB14_170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>1720267-15</u>
Sampled:	<u>07/24/17 14:00</u>	Prepared:	<u>07/28/17 07:00</u>
Solids:		Preparation:	<u>EPA 5030 Water MS</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
		Calibration:	<u>1707017</u>
			Instrument: <u>MS-V5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	DL	LOD	LOQ	Q
95-47-6	o-Xylene	1	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.500	105	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.9500	99.5	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	9.5900	95.9	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	174716	6.57	162953	6.57	
Chlorobenzene-d5 (IS)	69202	9.61	64183	9.62	
1,4-Difluorobenzene (IS)	258428	7.38	237313	7.38	

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

PREPARATION BATCH SUMMARY**EPA-8260B**

Laboratory: BC Laboratories SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Batch: B[G2380 Batch Matrix: Water Preparation: EPA 5030 Water MS

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
26PZ01_170724	1720267-01	28JUL51.D	07/28/17 07:00	Full SAP LIST
26PZ02_170724	1720267-02	28JUL52.D	07/28/17 07:00	Full SAP LIST
26PZ03_170724	1720267-03	28JUL53.D	07/28/17 07:00	Full SAP LIST
27EW-01_170724	1720267-04	28JUL54.D	07/28/17 07:00	Full SAP LIST
27EW-05_170724	1720267-05	28JUL55.D	07/28/17 07:00	Full SAP LIST
27EW-19_170724	1720267-06	28JUL56.D	07/28/17 07:00	Full SAP LIST
27EW-20_170724	1720267-07	28JUL57.D	07/28/17 07:00	Full SAP LIST
27MW06_170724	1720267-08	28JUL58.D	07/28/17 07:00	Full SAP LIST
27MW07_170724	1720267-09	28JUL59.D	07/28/17 07:00	Full SAP LIST
27MW08_170724	1720267-10	28JUL67.D	07/28/17 07:00	Full SAP LIST
27MW09_170724	1720267-11	28JUL60.D	07/28/17 07:00	Full SAP LIST
S13-TT-MW02_170724	1720267-12	28JUL68.D	07/28/17 07:00	short list - Benzene & Ethylbenzen only
EB22_170724	1720267-13	28JUL69.D	07/28/17 07:00	Full SAP LIST
EB23_170724	1720267-14	28JUL70.D	07/28/17 07:00	Full SAP LIST
TB14_170724	1720267-15	28JUL71.D	07/28/17 07:00	Full SAP LIST
Blank	B[G2380-BLK1	28JUL66.D	07/28/17 07:00	
LCS	B[G2380-BS1	28JUL72.D	07/28/17 07:00	
27MW08_170724	B[G2380-MS1	28JUL73.D	07/28/17 07:00	
27MW08_170724	B[G2380-MSD1	28JUL74.D	07/28/17 07:00	



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9210 Sky Park Court #200
San Diego, CA 92123

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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD BLANK DATA SHEET EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>B[G2380-BLK1</u>
Prepared:	<u>07/28/17 07:00</u>	Preparation:	<u>EPA 5030 Water MS</u>
Analyzed:	<u>07/29/17 08:25</u>	Instrument:	<u>MS-V5</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
			Calibration: <u>1707017</u>

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
71-43-2	Benzene	0.16	0.083	0.16	0.50	U
108-86-1	Bromobenzene	0.16	0.13	0.16	0.50	U
74-97-5	Bromochloromethane	0.30	0.24	0.30	1.0	U
75-27-4	Bromodichloromethane	0.30	0.14	0.30	0.50	U
75-25-2	Bromoform	0.30	0.27	0.30	0.60	U
74-83-9	Bromomethane	0.25	0.25	0.25	0.60	U
104-51-8	n-Butylbenzene	0.16	0.11	0.16	0.50	U
135-98-8	sec-Butylbenzene	0.16	0.15	0.16	0.50	U
98-06-6	tert-Butylbenzene	0.16	0.13	0.16	0.50	U
56-23-5	Carbon tetrachloride	0.20	0.18	0.20	0.50	U
108-90-7	Chlorobenzene	0.16	0.093	0.16	0.50	U
75-00-3	Chloroethane	0.16	0.14	0.16	0.50	U
67-66-3	Chloroform	0.16	0.12	0.16	0.50	U
74-87-3	Chloromethane	0.16	0.14	0.16	0.50	U
95-49-8	2-Chlorotoluene	0.20	0.20	0.20	0.50	U
106-43-4	4-Chlorotoluene	0.16	0.15	0.16	0.50	U
124-48-1	Dibromochloromethane	0.16	0.13	0.16	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	0.44	0.50	1.0	U
106-93-4	1,2-Dibromoethane	0.16	0.16	0.16	0.50	U
74-95-3	Dibromomethane	0.30	0.24	0.30	1.0	U
95-50-1	1,2-Dichlorobenzene	0.16	0.072	0.16	0.50	U
541-73-1	1,3-Dichlorobenzene	0.16	0.15	0.16	0.50	U
106-46-7	1,4-Dichlorobenzene	0.16	0.062	0.16	0.50	U
75-71-8	Dichlorodifluoromethane	0.16	0.099	0.16	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD BLANK DATA SHEET EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>B[G2380-BLK1</u>
Prepared:	<u>07/28/17 07:00</u>	Preparation:	<u>EPA 5030 Water MS</u>
Analyzed:	<u>07/29/17 08:25</u>	Instrument:	<u>MS-V5</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
			Calibration: <u>1707017</u>

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
75-34-3	1,1-Dichloroethane	0.16	0.11	0.16	0.50	U
107-06-2	1,2-Dichloroethane	0.20	0.17	0.20	0.50	U
75-35-4	1,1-Dichloroethene	0.20	0.18	0.20	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.16	0.085	0.16	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.16	0.15	0.16	0.50	U
78-87-5	1,2-Dichloropropane	0.16	0.13	0.16	0.50	U
142-28-9	1,3-Dichloropropane	0.16	0.086	0.16	0.50	U
594-20-7	2,2-Dichloropropane	0.16	0.13	0.16	0.50	U
563-58-6	1,1-Dichloropropene	0.16	0.085	0.16	0.50	U
100-41-4	Ethylbenzene	0.16	0.098	0.16	0.50	U
87-68-3	Hexachlorobutadiene	0.20	0.17	0.20	0.50	U
98-82-8	Isopropylbenzene	0.16	0.14	0.16	0.50	U
99-87-6	p-Isopropyltoluene	0.16	0.12	0.16	0.50	U
75-09-2	Methylene chloride	0.50	0.48	0.50	1.0	U
1634-04-4	Methyl t-butyl ether	0.16	0.11	0.16	0.50	U
91-20-3	Naphthalene	0.40	0.36	0.40	0.50	U
103-65-1	n-Propylbenzene	0.16	0.11	0.16	0.50	U
100-42-5	Styrene	0.16	0.068	0.16	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	0.18	0.20	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	0.17	0.20	0.50	U
127-18-4	Tetrachloroethene	0.16	0.13	0.16	0.50	U
108-88-3	Toluene	0.16	0.093	0.16	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.16	0.16	0.16	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.20	0.19	0.20	0.50	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD BLANK DATA SHEET EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>	Laboratory ID:	<u>B[G2380-BLK1</u>
Prepared:	<u>07/28/17 07:00</u>	Preparation:	<u>EPA 5030 Water MS</u>
Analyzed:	<u>07/29/17 08:25</u>	Instrument:	<u>MS-V5</u>
Batch:	<u>B[G2380</u>	Sequence:	<u>1713324</u>
			Calibration: <u>1707017</u>

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
71-55-6	1,1,1-Trichloroethane	0.16	0.11	0.16	0.50	U
79-00-5	1,1,2-Trichloroethane	0.16	0.16	0.16	0.50	U
79-01-6	Trichloroethene	0.16	0.085	0.16	0.50	U
75-69-4	Trichlorofluoromethane	0.16	0.13	0.16	0.50	U
96-18-4	1,2,3-Trichloropropane	0.33	0.24	0.33	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.16	0.12	0.16	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.16	0.12	0.16	0.50	U
75-01-4	Vinyl chloride	0.16	0.12	0.16	0.50	U
67-64-1	Acetone	5.0	4.6	5.0	10	U
994-05-8	t-Amyl Methyl ether	0.30	0.25	0.30	0.50	U
75-65-0	t-Butyl alcohol	10	9.4	10	12	U
75-15-0	Carbon disulfide	0.40	0.38	0.40	1.0	U
108-20-3	Diisopropyl ether	0.30	0.23	0.30	0.50	U
637-92-3	Ethyl t-butyl ether	0.20	0.18	0.20	0.50	U
78-93-3	Methyl ethyl ketone	3.0	2.5	3.0	10	U
179601-23-1	p- & m-Xylenes	0.30	0.28	0.30	0.50	U
95-47-6	o-Xylene	0.16	0.082	0.16	0.50	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4 (Surrogate)	10.000	10.060	101	81 - 118	
Toluene-d8 (Surrogate)	10.000	9.7600	97.6	89 - 112	
4-Bromofluorobenzene (Surrogate)	10.000	10.040	100	85 - 114	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (IS)	159258	6.57	162953	6.57	



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD BLANK DATA SHEET EPA-8260B

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: B[G2380-BLK1 File ID: 28JUL66.D
Prepared: 07/28/17 07:00 Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
Analyzed: 07/29/17 08:25 Instrument: MS-V5
Batch: B[G2380 Sequence: 1713324 Calibration: 1707017

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Chlorobenzene-d5 (IS)	60434	9.62	64183	9.62	
1,4-Difluorobenzene (IS)	237571	7.38	237313	7.38	



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

27MW08 170724

Laboratory: BC Laboratories SDG: 17-20267
 Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
 Matrix: Water
 Batch: B[G2380 Laboratory ID: B[G2380-MS1
 Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
 Source Sample Number: 1720267-10

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
Benzene	25.000	ND	22.950	91.8	79 - 120
Bromobenzene	25.000	ND	27.550	110	80 - 120
Bromochloromethane	25.000	ND	23.700	94.8	78 - 123
Bromodichloromethane	25.000	ND	25.850	103	79 - 125
Bromoform	25.000	ND	28.030	112	66 - 130
Bromomethane	25.000	ND	22.760	91.0	53 - 141
n-Butylbenzene	25.000	ND	26.300	105	75 - 128
sec-Butylbenzene	25.000	ND	27.180	109	77 - 126
tert-Butylbenzene	25.000	ND	26.360	105	78 - 124
Carbon tetrachloride	25.000	ND	27.300	109	72 - 136
Chlorobenzene	25.000	ND	23.790	95.2	82 - 118
Chloroethane	25.000	ND	22.860	91.4	60 - 138
Chloroform	25.000	ND	24.080	96.3	79 - 124
Chloromethane	25.000	ND	21.810	87.2	50 - 139
2-Chlorotoluene	25.000	ND	25.020	100	79 - 122
4-Chlorotoluene	25.000	ND	25.060	100	78 - 122
Dibromochloromethane	25.000	ND	26.940	108	74 - 126
1,2-Dibromo-3-chloropropane	25.000	ND	25.600	102	62 - 128
1,2-Dibromoethane	25.000	ND	25.430	102	77 - 121
Dibromomethane	25.000	ND	25.410	102	79 - 123
1,2-Dichlorobenzene	25.000	ND	24.590	98.4	80 - 119
1,3-Dichlorobenzene	25.000	ND	25.840	103	80 - 119
1,4-Dichlorobenzene	25.000	ND	25.530	102	79 - 118
Dichlorodifluoromethane	25.000	ND	27.380	110	32 - 152
1,1-Dichloroethane	25.000	ND	23.620	94.5	77 - 125



AMEC Environmental & Infrastructure-
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Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

27MW08 170724

Laboratory: BC Laboratories SDG: 17-20267
 Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
 Matrix: Water
 Batch: B[G2380 Laboratory ID: B[G2380-MS1
 Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
 Source Sample Number: 1720267-10

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
1,2-Dichloroethane	25.000	ND	23.970	95.9	73 - 128
1,1-Dichloroethene	25.000	ND	25.950	104	71 - 131
cis-1,2-Dichloroethene	25.000	0.41000	24.310	95.6	78 - 123
trans-1,2-Dichloroethene	25.000	ND	24.680	98.7	75 - 124
1,2-Dichloropropane	25.000	ND	22.970	91.9	78 - 122
1,3-Dichloropropane	25.000	ND	23.260	93.0	80 - 119
2,2-Dichloropropane	25.000	ND	26.600	106	60 - 139
1,1-Dichloropropene	25.000	ND	23.390	93.6	79 - 125
cis-1,3-Dichloropropene	25.000	ND	24.850	99.4	75 - 124
trans-1,3-Dichloropropene	25.000	ND	25.830	103	73 - 127
Ethylbenzene	25.000	ND	26.110	104	79 - 121
Hexachlorobutadiene	25.000	ND	28.850	115	66 - 134
Isopropylbenzene	25.000	ND	26.860	107	72 - 131
p-Isopropyltoluene	25.000	ND	27.230	109	77 - 127
Methylene chloride	25.000	ND	22.630	90.5	74 - 124
Methyl t-butyl ether	25.000	ND	23.720	94.9	71 - 124
Naphthalene	25.000	ND	25.530	102	61 - 128
n-Propylbenzene	25.000	ND	25.090	100	76 - 126
Styrene	25.000	ND	27.300	109	78 - 123
1,1,1,2-Tetrachloroethane	25.000	ND	27.900	112	78 - 124
1,1,2,2-Tetrachloroethane	25.000	ND	25.580	102	71 - 121
Tetrachloroethene	25.000	ND	27.180	109	74 - 129
Toluene	25.000	ND	25.510	102	80 - 121
1,2,3-Trichlorobenzene	25.000	ND	27.910	112	69 - 129
1,2,4-Trichlorobenzene	25.000	ND	28.880	116	69 - 130



AMEC Environmental & Infrastructure-
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Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

27MW08 170724

Laboratory: BC Laboratories SDG: 17-20267
 Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
 Matrix: Water
 Batch: B[G2380 Laboratory ID: B[G2380-MS1
 Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml
 Source Sample Number: 1720267-10

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
1,1,1-Trichloroethane	25.000	ND	26.580	106	74 - 131
1,1,2-Trichloroethane	25.000	ND	23.640	94.6	80 - 119
Trichloroethene	25.000	0.16000	26.180	104	79 - 123
Trichlorofluoromethane	25.000	ND	26.290	105	65 - 141
1,2,3-Trichloropropane	25.000	ND	27.510	110	73 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.000	ND	25.980	104	70 - 136
1,2,4-Trimethylbenzene	25.000	ND	26.350	105	76 - 124
1,3,5-Trimethylbenzene	25.000	ND	27.830	111	75 - 124
Vinyl chloride	25.000	ND	24.750	99.0	58 - 137
Total Xylenes	75.000	ND	78.070	104	79 - 121
Acetone	320.00	ND	307.51	96.1	39 - 160
Acetonitrile	160.00	ND	157.25	98.3	50 - 142
Allyl chloride	32.000	ND	31.830	99.5	68 - 130
t-Amyl Methyl ether	16.000	ND	15.260	95.4	68 - 128
Benzyl chloride	32.000	ND	40.970	128	42 - 138
t-Butyl alcohol	800.00	ND	831.54	104	68 - 129
Carbon disulfide	32.000	ND	31.110	97.2	64 - 133
Chloroprene	32.000	ND	33.370	104	65 - 135
Diisopropyl ether	16.000	ND	15.470	96.7	67 - 128
Ethyl t-butyl ether	16.000	ND	15.450	96.6	70 - 127
2-Hexanone	320.00	ND	329.20	103	57 - 139
Methyl ethyl ketone	160.00	ND	158.32	99.0	56 - 143
Methyl isobutyl ketone	160.00	ND	167.40	105	67 - 130
Vinyl acetate	160.00	ND	157.09	98.2	54 - 146



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Project Manager: Kevin Olness

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

27MW08 170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>		
Batch:	<u>B[G2380</u>	Laboratory ID:	<u>B[G2380-MSD1</u>
Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>
Source Sample Number:	<u>1720267-10</u>		

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Benzene	25.000	22.220	88.9	3.23	30	79 - 120
Bromobenzene	25.000	25.810	103	6.52	30	80 - 120
Bromochloromethane	25.000	23.190	92.8	2.18	30	78 - 123
Bromodichloromethane	25.000	24.720	98.9	4.47	30	79 - 125
Bromoform	25.000	27.120	108	3.30	30	66 - 130
Bromomethane	25.000	21.500	86.0	5.69	30	53 - 141
n-Butylbenzene	25.000	24.570	98.3	6.80	30	75 - 128
sec-Butylbenzene	25.000	25.900	104	4.82	30	77 - 126
tert-Butylbenzene	25.000	24.800	99.2	6.10	30	78 - 124
Carbon tetrachloride	25.000	25.710	103	6.00	30	72 - 136
Chlorobenzene	25.000	22.370	89.5	6.15	30	82 - 118
Chloroethane	25.000	21.730	86.9	5.07	30	60 - 138
Chloroform	25.000	22.630	90.5	6.21	30	79 - 124
Chloromethane	25.000	20.720	82.9	5.13	30	50 - 139
2-Chlorotoluene	25.000	23.340	93.4	6.95	30	79 - 122
4-Chlorotoluene	25.000	22.990	92.0	8.62	30	78 - 122
Dibromochloromethane	25.000	26.240	105	2.63	30	74 - 126
1,2-Dibromo-3-chloropropane	25.000	24.900	99.6	2.77	30	62 - 128
1,2-Dibromoethane	25.000	24.140	96.6	5.20	30	77 - 121
Dibromomethane	25.000	25.680	103	1.06	30	79 - 123
1,2-Dichlorobenzene	25.000	23.120	92.5	6.16	30	80 - 119
1,3-Dichlorobenzene	25.000	23.960	95.8	7.55	30	80 - 119
1,4-Dichlorobenzene	25.000	23.760	95.0	7.18	30	79 - 118
Dichlorodifluoromethane	25.000	26.410	106	3.61	30	32 - 152
1,1-Dichloroethane	25.000	22.270	89.1	5.88	30	77 - 125
1,2-Dichloroethane	25.000	22.810	91.2	4.96	30	73 - 128



AMEC Environmental & Infrastructure-
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Project: Alameda
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MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

27MW08 170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>		
Batch:	<u>B[G2380</u>	Laboratory ID:	<u>B[G2380-MSD1</u>
Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>
Source Sample Number:	<u>1720267-10</u>		

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,1-Dichloroethene	25.000	25.180	101	3.01	30	71 - 131
cis-1,2-Dichloroethene	25.000	22.800	89.6	6.41	30	78 - 123
trans-1,2-Dichloroethene	25.000	23.550	94.2	4.69	30	75 - 124
1,2-Dichloropropane	25.000	23.570	94.3	2.58	30	78 - 122
1,3-Dichloropropane	25.000	23.130	92.5	0.560	30	80 - 119
2,2-Dichloropropane	25.000	25.030	100	6.08	30	60 - 139
1,1-Dichloropropene	25.000	22.290	89.2	4.82	30	79 - 125
cis-1,3-Dichloropropene	25.000	24.750	99.0	0.403	30	75 - 124
trans-1,3-Dichloropropene	25.000	25.720	103	0.427	30	73 - 127
Ethylbenzene	25.000	25.270	101	3.27	30	79 - 121
Hexachlorobutadiene	25.000	26.010	104	10.4	30	66 - 134
Isopropylbenzene	25.000	25.200	101	6.38	30	72 - 131
p-Isopropyltoluene	25.000	25.510	102	6.52	30	77 - 127
Methylene chloride	25.000	22.200	88.8	1.92	30	74 - 124
Methyl t-butyl ether	25.000	22.620	90.5	4.75	30	71 - 124
Naphthalene	25.000	24.240	97.0	5.18	30	61 - 128
n-Propylbenzene	25.000	23.190	92.8	7.87	30	76 - 126
Styrene	25.000	25.570	102	6.54	30	78 - 123
1,1,1,2-Tetrachloroethane	25.000	26.650	107	4.58	30	78 - 124
1,1,2,2-Tetrachloroethane	25.000	24.220	96.9	5.46	30	71 - 121
Tetrachloroethene	25.000	26.710	107	1.74	30	74 - 129
Toluene	25.000	25.130	101	1.50	30	80 - 121
1,2,3-Trichlorobenzene	25.000	26.210	105	6.28	30	69 - 129
1,2,4-Trichlorobenzene	25.000	26.840	107	7.32	30	69 - 130
1,1,1-Trichloroethane	25.000	25.120	100	5.65	30	74 - 131
1,1,2-Trichloroethane	25.000	23.920	95.7	1.18	30	80 - 119



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MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-8260B

27MW08 170724

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>		
Batch:	<u>B[G2380</u>	Laboratory ID:	<u>B[G2380-MSD1</u>
Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>
Source Sample Number:	<u>1720267-10</u>		

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Trichloroethene	25.000	25.970	103	0.805	30	79 - 123
Trichlorofluoromethane	25.000	24.700	98.8	6.24	30	65 - 141
1,2,3-Trichloropropane	25.000	25.730	103	6.69	30	73 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.000	25.330	101	2.53	30	70 - 136
1,2,4-Trimethylbenzene	25.000	24.640	98.6	6.71	30	76 - 124
1,3,5-Trimethylbenzene	25.000	25.640	103	8.19	30	75 - 124
Vinyl chloride	25.000	23.310	93.2	5.99	30	58 - 137
Total Xylenes	75.000	73.390	97.9	6.18	30	79 - 121
Acetone	320.00	265.57	83.0	14.6	30	39 - 160
Acetonitrile	160.00	155.72	97.3	0.978	30	50 - 142
Allyl chloride	32.000	29.370	91.8	8.04	30	68 - 130
t-Amyl Methyl ether	16.000	13.810	86.3	9.98	30	68 - 128
Benzyl chloride	32.000	37.110	116	9.89	30	42 - 138
t-Butyl alcohol	800.00	751.19	93.9	10.2	30	68 - 129
Carbon disulfide	32.000	29.110	91.0	6.64	30	64 - 133
Chloroprene	32.000	30.220	94.4	9.91	30	65 - 135
Diisopropyl ether	16.000	14.310	89.4	7.79	30	67 - 128
Ethyl t-butyl ether	16.000	13.800	86.2	11.3	30	70 - 127
2-Hexanone	320.00	300.06	93.8	9.26	30	57 - 139
Methyl ethyl ketone	160.00	138.97	86.9	13.0	30	56 - 143
Methyl isobutyl ketone	160.00	154.05	96.3	8.31	30	67 - 130
Vinyl acetate	160.00	140.25	87.7	11.3	30	54 - 146

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

LCS RECOVERY

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>		
Batch:	<u>B[G2380</u>	Laboratory ID:	<u>B[G2380-BS1</u>
Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Benzene	25.000	22.870	91.5	79 - 120
Bromobenzene	25.000	26.710	107	80 - 120
Bromochloromethane	25.000	22.910	91.6	78 - 123
Bromodichloromethane	25.000	25.090	100	79 - 125
Bromoform	25.000	26.650	107	66 - 130
Bromomethane	25.000	20.780	83.1	53 - 141
n-Butylbenzene	25.000	26.000	104	75 - 128
sec-Butylbenzene	25.000	27.330	109	77 - 126
tert-Butylbenzene	25.000	25.870	103	78 - 124
Carbon tetrachloride	25.000	27.050	108	72 - 136
Chlorobenzene	25.000	23.330	93.3	82 - 118
Chloroethane	25.000	22.070	88.3	60 - 138
Chloroform	25.000	23.870	95.5	79 - 124
Chloromethane	25.000	21.820	87.3	50 - 139
2-Chlorotoluene	25.000	24.780	99.1	79 - 122
4-Chlorotoluene	25.000	24.100	96.4	78 - 122
Dibromochloromethane	25.000	26.420	106	74 - 126
1,2-Dibromo-3-chloropropane	25.000	22.630	90.5	62 - 128
1,2-Dibromoethane	25.000	24.830	99.3	77 - 121
Dibromomethane	25.000	25.320	101	79 - 123
1,2-Dichlorobenzene	25.000	23.750	95.0	80 - 119
1,3-Dichlorobenzene	25.000	25.210	101	80 - 119
1,4-Dichlorobenzene	25.000	24.920	99.7	79 - 118
Dichlorodifluoromethane	25.000	28.700	115	32 - 152



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

LCS RECOVERY

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>		
Batch:	<u>B[G2380</u>	Laboratory ID:	<u>B[G2380-BS1</u>
Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
1,1-Dichloroethane	25.000	23.520	94.1	77 - 125
1,2-Dichloroethane	25.000	24.710	98.8	73 - 128
1,1-Dichloroethene	25.000	26.520	106	71 - 131
cis-1,2-Dichloroethene	25.000	23.540	94.2	78 - 123
trans-1,2-Dichloroethene	25.000	24.610	98.4	75 - 124
1,2-Dichloropropane	25.000	22.720	90.9	78 - 122
1,3-Dichloropropane	25.000	22.300	89.2	80 - 119
2,2-Dichloropropane	25.000	26.840	107	60 - 139
1,1-Dichloropropene	25.000	23.010	92.0	79 - 125
cis-1,3-Dichloropropene	25.000	24.350	97.4	75 - 124
trans-1,3-Dichloropropene	25.000	25.550	102	73 - 127
Ethylbenzene	25.000	25.700	103	79 - 121
Hexachlorobutadiene	25.000	28.410	114	66 - 134
Isopropylbenzene	25.000	26.870	107	72 - 131
p-Isopropyltoluene	25.000	27.380	110	77 - 127
Methylene chloride	25.000	23.160	92.6	74 - 124
Methyl t-butyl ether	25.000	22.580	90.3	71 - 124
Naphthalene	25.000	23.300	93.2	61 - 128
n-Propylbenzene	25.000	24.930	99.7	76 - 126
Styrene	25.000	26.100	104	78 - 123
1,1,1,2-Tetrachloroethane	25.000	27.540	110	78 - 124
1,1,2,2-Tetrachloroethane	25.000	23.350	93.4	71 - 121
Tetrachloroethene	25.000	28.270	113	74 - 129
Toluene	25.000	25.050	100	80 - 121



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Project Number: 5023146096
Project Manager: Kevin Olness

LCS RECOVERY EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Matrix:	<u>Water</u>		
Batch:	<u>B[G2380</u>	Laboratory ID:	<u>B[G2380-BS1</u>
Preparation:	<u>EPA 5030 Water MS</u>	Initial/Final:	<u>25 ml / 25 ml</u>

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
1,2,3-Trichlorobenzene	25.000	27.330	109	69 - 129
1,2,4-Trichlorobenzene	25.000	27.680	111	69 - 130
1,1,1-Trichloroethane	25.000	26.230	105	74 - 131
1,1,2-Trichloroethane	25.000	23.260	93.0	80 - 119
Trichloroethene	25.000	26.030	104	79 - 123
Trichlorofluoromethane	25.000	26.750	107	65 - 141
1,2,3-Trichloropropane	25.000	27.190	109	73 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.000	26.700	107	70 - 136
1,2,4-Trimethylbenzene	25.000	25.720	103	76 - 124
1,3,5-Trimethylbenzene	25.000	27.050	108	75 - 124
Vinyl chloride	25.000	24.980	99.9	58 - 137
Total Xylenes	75.000	76.790	102	79 - 121
Acetone	320.00	306.22	95.7	39 - 160
Acetonitrile	160.00	151.17	94.5	50 - 142
Allyl chloride	32.000	31.990	100	68 - 130
t-Amyl Methyl ether	16.000	14.470	90.4	68 - 128
Benzyl chloride	32.000	38.540	120	42 - 138
t-Butyl alcohol	800.00	762.46	95.3	68 - 129
Carbon disulfide	32.000	31.420	98.2	64 - 133
Chloroprene	32.000	34.120	107	65 - 135
Diisopropyl ether	16.000	15.470	96.7	67 - 128
Ethyl t-butyl ether	16.000	14.880	93.0	70 - 127
2-Hexanone	320.00	323.43	101	57 - 139
Methyl ethyl ketone	160.00	147.82	92.4	56 - 143



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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

LCS RECOVERY
EPA-8260B

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water
Batch: B[G2380 Laboratory ID: B[G2380-BS1
Preparation: EPA 5030 Water MS Initial/Final: 25 ml / 25 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Methyl isobutyl ketone	160.00	164.66	103	67 - 130
Vinyl acetate	160.00	155.39	97.1	54 - 146

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY EPA-8260B

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1712752 Instrument: MS-V5
Matrix: Water Calibration: 1707017

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	1712752-TUN2	17JUL49.D	07/17/17 23:37
Cal Standard	1712752-CALD	17JUL50.D	07/18/17 00:00
Cal Standard	1712752-CALE	17JUL51.D	07/18/17 00:23
Cal Standard	1712752-CALF	17JUL52.D	07/18/17 00:46
Cal Standard	1712752-CALG	17JUL53.D	07/18/17 01:09
Cal Standard	1712752-CALH	17JUL54.D	07/18/17 01:32
Cal Standard	1712752-CALI	17JUL55.D	07/18/17 01:55
MS Tune	1712752-TUN1	20JUL02.D	07/20/17 08:09
Cal Standard	1712752-CAL1	20JUL03.D	07/20/17 08:32
Cal Standard	1712752-CAL2	20JUL05.D	07/20/17 09:18
Cal Standard	1712752-CAL3	20JUL06.D	07/20/17 09:42
Cal Standard	1712752-CAL4	20JUL07.D	07/20/17 10:05
Cal Standard	1712752-CAL5	20JUL08.D	07/20/17 10:28
Cal Standard	1712752-CAL6	20JUL09.D	07/20/17 10:51
Cal Standard	1712752-CAL7	20JUL15.D	07/20/17 13:09
Cal Standard	1712752-CAL8	20JUL17.D	07/20/17 13:55
Cal Standard	1712752-CAL9	20JUL18.D	07/20/17 14:18
Cal Standard	1712752-CALA	20JUL19.D	07/20/17 14:41
Cal Standard	1712752-CALB	20JUL20.D	07/20/17 15:04
Cal Standard	1712752-CALC	20JUL21.D	07/20/17 15:27



AMEC Environmental & Infrastructure-
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Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
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ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA-8260B

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1713324 Instrument: MS-V5
Matrix: Water Calibration: 1707017

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	1713324-ICV1	20JUL12.D	07/20/17 12:00
Initial Cal Blank	1713324-ICB1	20JUL14.D	07/20/17 12:46
Initial Cal Check	1713324-ICV2	20JUL24.D	07/20/17 16:36
Initial Cal Blank	1713324-ICB2	20JUL26.D	07/20/17 17:22
MS Tune	1713324-TUN2	28JUL32.D	07/28/17 19:23
Calibration Check	1713324-CCV3	28JUL33.D	07/28/17 19:46
Calibration Check	1713324-CCV4	28JUL34.D	07/28/17 20:09
Calibration Blank	1713324-CCB2	28JUL35.D	07/28/17 20:32
26PZ01_170724	1720267-01	28JUL51.D	07/29/17 02:40
26PZ02_170724	1720267-02	28JUL52.D	07/29/17 03:03
26PZ03_170724	1720267-03	28JUL53.D	07/29/17 03:26
27EW-01_170724	1720267-04	28JUL54.D	07/29/17 03:49
27EW-05_170724	1720267-05	28JUL55.D	07/29/17 04:12
27EW-19_170724	1720267-06	28JUL56.D	07/29/17 04:35
27EW-20_170724	1720267-07	28JUL57.D	07/29/17 04:58
27MW06_170724	1720267-08	28JUL58.D	07/29/17 05:21
27MW07_170724	1720267-09	28JUL59.D	07/29/17 05:44
27MW09_170724	1720267-11	28JUL60.D	07/29/17 06:07
MS Tune	1713324-TUN3	28JUL62.D	07/29/17 06:53
Calibration Check	1713324-CCV5	28JUL63.D	07/29/17 07:16
Calibration Check	1713324-CCV6	28JUL64.D	07/29/17 07:39
Calibration Blank	1713324-CCB3	28JUL65.D	07/29/17 08:02
Blank	B[G2380-BLK1	28JUL66.D	07/29/17 08:25
27MW08_170724	1720267-10	28JUL67.D	07/29/17 08:48
S13-TT-MW02_170724	1720267-12	28JUL68.D	07/29/17 09:11
EB22_170724	1720267-13	28JUL69.D	07/29/17 09:34



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Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY EPA-8260B

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1713324 Instrument: MS-V5
Matrix: Water Calibration: 1707017

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
EB23_170724	1720267-14	28JUL70.D	07/29/17 09:57
TB14_170724	1720267-15	28JUL71.D	07/29/17 10:19
LCS	B[G2380-BS1	28JUL72.D	07/29/17 10:42
27MW08_170724	B[G2380-MS1	28JUL73.D	07/29/17 11:05
27MW08_170724	B[G2380-MSD1	28JUL74.D	07/29/17 11:28
MS Tune	1713324-TUN4	29JUL12.D	07/29/17 18:45
Calibration Check	1713324-CCV7	29JUL13.D	07/29/17 19:08
Calibration Check	1713324-CCV8	29JUL14.D	07/29/17 19:31
Calibration Blank	1713324-CCB4	29JUL15.D	07/29/17 19:54



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MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK EPA-8260B

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Lab File ID: 20JUL02.D Injection Date: 07/20/17
Instrument ID: MS-V5 Injection Time: 08:09
Sequence: 1712752 Lab Sample ID: 1712752-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	20.8	PASS
Mass 75	30 - 60% of Mass 95	40.3	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	8.2	PASS
Mass 173	Less than 2% of Mass 174	0	PASS
Mass 174	50 - 100% of Mass 95	53.7	PASS
Mass 175	5 - 9% of Mass 174	6.24	PASS
Mass 176	95 - 101% of Mass 174	98.1	PASS
Mass 177	5 - 9% of Mass 176	8.19	PASS



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MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Lab File ID:	<u>17JUL49.D</u>	Injection Date:	<u>07/17/17</u>
Instrument ID:	<u>MS-V5</u>	Injection Time:	<u>23:37</u>
Sequence:	<u>1712752</u>	Lab Sample ID:	<u>1712752-TUN2</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	19.3	PASS
Mass 75	30 - 60% of Mass 95	38.6	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	7.2	PASS
Mass 173	Less than 2% of Mass 174	0.531	PASS
Mass 174	50 - 100% of Mass 95	72.4	PASS
Mass 175	5 - 9% of Mass 174	7.55	PASS
Mass 176	95 - 101% of Mass 174	96.6	PASS
Mass 177	5 - 9% of Mass 176	6.03	PASS



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MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Lab File ID:	<u>28JUL32.D</u>	Injection Date:	<u>07/28/17</u>
Instrument ID:	<u>MS-V5</u>	Injection Time:	<u>19:23</u>
Sequence:	<u>1713324</u>	Lab Sample ID:	<u>1713324-TUN2</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	18.4	PASS
Mass 75	30 - 60% of Mass 95	42.7	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	6.42	PASS
Mass 173	Less than 2% of Mass 174	0	PASS
Mass 174	50 - 100% of Mass 95	79.2	PASS
Mass 175	5 - 9% of Mass 174	7.15	PASS
Mass 176	95 - 101% of Mass 174	96.6	PASS
Mass 177	5 - 9% of Mass 176	5.08	PASS



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MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Lab File ID:	<u>28JUL62.D</u>	Injection Date:	<u>07/29/17</u>
Instrument ID:	<u>MS-V5</u>	Injection Time:	<u>06:53</u>
Sequence:	<u>1713324</u>	Lab Sample ID:	<u>1713324-TUN3</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	19.6	PASS
Mass 75	30 - 60% of Mass 95	44.7	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	6.7	PASS
Mass 173	Less than 2% of Mass 174	0	PASS
Mass 174	50 - 100% of Mass 95	71.9	PASS
Mass 175	5 - 9% of Mass 174	7.47	PASS
Mass 176	95 - 101% of Mass 174	99.4	PASS
Mass 177	5 - 9% of Mass 176	5.41	PASS



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MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Lab File ID:	<u>29JUL12.D</u>	Injection Date:	<u>07/29/17</u>
Instrument ID:	<u>MS-V5</u>	Injection Time:	<u>18:45</u>
Sequence:	<u>1713324</u>	Lab Sample ID:	<u>1713324-TUN4</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
Mass 50	15 - 40% of Mass 95	16.8	PASS
Mass 75	30 - 60% of Mass 95	40.1	PASS
Mass 95	Base peak, 100% relative abundance	100	PASS
Mass 96	5 - 9% of Mass 95	7.09	PASS
Mass 173	Less than 2% of Mass 174	0.759	PASS
Mass 174	50 - 100% of Mass 95	86.6	PASS
Mass 175	5 - 9% of Mass 174	8.86	PASS
Mass 176	95 - 101% of Mass 174	97	PASS
Mass 177	5 - 9% of Mass 176	5.33	PASS



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Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>20JUL12.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713324</u>	Injection Date:	<u>07/20/17</u>
Lab Sample ID:	<u>1713324-ICV1</u>	Injection Time:	<u>12:00</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzene	A	25.000	24.890	2.047739	2.039122		-0.4	20
Bromobenzene	A	25.000	25.230	1.167814	1.17861		0.9	20
Bromochloromethane	A	25.000	24.530	0.1664346	0.1632807		-1.9	20
Bromodichloromethane	A	25.000	25.280	0.2878825	0.2911282		1.1	20
Bromoform	A	25.000	26.740	0.245463	0.2625679	0.1	7.0	20
Bromomethane	A	25.000	25.110	0.406522	0.4083079		0.4	20
n-Butylbenzene	A	25.000	26.100	4.798501	5.009032		4.4	20
sec-Butylbenzene	A	25.000	26.640	6.314385	6.729672		6.6	20
tert-Butylbenzene	A	25.000	25.400	4.660614	4.735605		1.6	20
Carbon tetrachloride	A	25.000	25.480	0.449341	0.457984		1.9	20
Chlorobenzene	A	25.000	23.360	3.316137	3.09848	0.3	-6.6	20
Chloroethane	A	25.000	24.110	0.5145747	0.4963064		-3.6	20
Chloroform	A	25.000	24.930	0.7571101	0.7548645		-0.3	20
Chloromethane	A	25.000	21.800	0.9407238	0.8204025	0.1	-12.8	20
2-Chlorotoluene	A	25.000	24.160	4.677137	4.5199		-3.4	20
4-Chlorotoluene	A	25.000	24.370	4.223867	4.117292		-2.5	20
Dibromochloromethane	A	25.000	26.550	0.1504286	0.1597323		6.2	20
1,2-Dibromo-3-chloropropane	A	25.000	28.170	7.330085E-02	0.0826084		12.7	20
1,2-Dibromoethane	A	25.000	26.200	0.1293784	0.1355752		4.8	20
Dibromomethane	A	25.000	26.740	9.576412E-02	0.1024155		6.9	20
1,2-Dichlorobenzene	A	25.000	24.020	2.15653	2.071804		-3.9	20
1,3-Dichlorobenzene	A	25.000	24.340	2.49992	2.433885		-2.6	20
1,4-Dichlorobenzene	A	25.000	24.380	2.443238	2.382478		-2.5	20



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CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>20JUL12.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713324</u>	Injection Date:	<u>07/20/17</u>
Lab Sample ID:	<u>1713324-ICV1</u>	Injection Time:	<u>12:00</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Dichlorodifluoromethane	A	25.000	26.330	0.4975939	0.5240701		5.3	20
1,1-Dichloroethane	A	25.000	25.490	1.070106	1.090882	0.1	1.9	20
1,2-Dichloroethane	A	25.000	24.460	0.4067953	0.3979766		-2.2	20
1,1-Dichloroethene	A	25.000	25.940	0.8069668	0.8371807		3.7	20
cis-1,2-Dichloroethene	A	25.000	25.330	0.5222008	0.5290657		1.3	20
trans-1,2-Dichloroethene	A	25.000	26.540	0.5009588	0.5318602		6.2	20
1,2-Dichloropropane	A	25.000	24.220	0.379403	0.3675628		-3.1	20
1,3-Dichloropropane	A	25.000	23.670	0.2528371	0.2393712		-5.3	20
2,2-Dichloropropane	A	25.000	25.930	0.602219	0.6245229		3.7	20
1,1-Dichloropropene	A	25.000	24.420	0.6845791	0.6686965		-2.3	20
cis-1,3-Dichloropropene	A	25.000	26.090	0.3594295	0.375053		4.3	20
trans-1,3-Dichloropropene	A	25.000	26.130	0.2346113	0.2452383		4.5	20
Ethylbenzene	A	25.000	25.810	1.948304	2.0114		3.2	20
Hexachlorobutadiene	A	25.000	25.210	0.86466	0.872002		0.8	20
Isopropylbenzene	A	25.000	26.250	5.700983	5.985719		5.0	20
p-Isopropyltoluene	A	25.000	26.690	5.149437	5.497681		6.8	20
Methylene chloride	A	25.000	24.890	0.4314876	0.4296029		-0.4	20
Methyl t-butyl ether	A	25.000	25.570	0.603852	0.6175321		2.3	20
Naphthalene	A	25.000	26.500	1.569043	1.6633		6.0	20
n-Propylbenzene	A	25.000	24.270	7.403456	7.187232		-2.9	20
Styrene	A	25.000	26.450	3.356924	3.551577		5.8	20
1,1,1,2-Tetrachloroethane	A	25.000	26.860	0.8160317	0.8766748		7.4	20
1,1,2,2-Tetrachloroethane	A	25.000	25.920	0.5437402	0.5638488	0.3	3.7	20



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>20JUL12.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713324</u>	Injection Date:	<u>07/20/17</u>
Lab Sample ID:	<u>1713324-ICV1</u>	Injection Time:	<u>12:00</u>

COMPOUND	(1) _{CAL} TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Tetrachloroethene	A	25.000	25.470	0.3290699	0.3353122		1.9	20
Toluene	A	25.000	24.960	0.8662846	0.8648716		-0.2	20
1,2,3-Trichlorobenzene	A	25.000	26.670	1.048181	1.118245		6.7	20
1,2,4-Trichlorobenzene	A	25.000	27.060	1.248966	1.351767		8.2	20
1,1,1-Trichloroethane	A	25.000	25.790	0.6553918	0.6760837		3.2	20
1,1,2-Trichloroethane	A	25.000	25.220	0.1556498	0.1570429		0.9	20
Trichloroethene	A	25.000	25.390	0.3434012	0.3487116		1.5	20
Trichlorofluoromethane	A	25.000	25.570	0.6158835	0.6299322		2.3	20
1,2,3-Trichloropropane	A	25.000	25.960	0.1156016	0.1200231		3.8	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	25.000	26.470	0.4228091	0.4476203		5.9	20
1,2,4-Trimethylbenzene	A	25.000	26.050	4.672745	4.868982		4.2	20
1,3,5-Trimethylbenzene	A	25.000	27.000	4.717828	5.09494		8.0	20
Vinyl chloride	A	25.000	24.480	0.7494116	0.7337211		-2.1	20
Total Xylenes	A	75.000	76.780	2.323025	2.378206		2.4	20
p- & m-Xylenes	A	50.000	51.130	2.383338	2.437307		2.3	20
o-Xylene	A	25.000	25.650	2.2024	2.260003		2.6	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>20JUL24.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713324</u>	Injection Date:	<u>07/20/17</u>
Lab Sample ID:	<u>1713324-ICV2</u>	Injection Time:	<u>16:36</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	320.00	311.29	4.120558E-02	4.008438E-02		-2.7	20
Acetonitrile	A	160.00	156.48	1.962376E-02	1.919169E-02		-2.2	20
Allyl chloride	A	32.000	30.910	1.003175	0.9689626		-3.4	20
t-Amyl Methyl ether	A	16.000	15.740	0.6727663	0.6619595		-1.6	20
Benzyl chloride	L	32.000	28.550	0.5754497	0.592096		-10.8	20
t-Butyl alcohol	A	800.00	778.65	0.0118311	1.151529E-02		-2.7	20
Carbon disulfide	A	32.000	30.220	1.516116	1.431992		-5.5	20
Chloroprene	A	32.000	29.870	1.054363	0.9841485		-6.7	20
Diisopropyl ether	A	16.000	15.560	0.3736986	0.3634691		-2.7	20
Ethanol	A	4000.0	3929.6	1.803136E-03	1.771401E-03		-1.8	20
Ethyl t-butyl ether	A	16.000	14.950	1.222825	1.142353		-6.6	20
2-Hexanone	A	320.00	300.02	7.579232E-02	7.106038E-02		-6.2	20
Methyl ethyl ketone	A	160.00	150.32	7.316144E-02	6.873728E-02		-6.0	20
Methyl isobutyl ketone	A	160.00	150.81	0.1118834	0.1054587		-5.7	20
Vinyl acetate	A	160.00	149.46	0.5836509	0.5452114		-6.6	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>28JUL33.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713324</u>	Injection Date:	<u>07/28/17</u>
Lab Sample ID:	<u>1713324-CCV3</u>	Injection Time:	<u>19:46</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzene	A	25.000	23.580	2.047739	1.931162		-5.7	20
Bromobenzene	A	25.000	24.050	1.167814	1.123259		-3.8	20
Bromochloromethane	A	25.000	24.350	0.1664346	0.1620954		-2.6	20
Bromodichloromethane	A	25.000	24.010	0.2878825	0.2764394		-4.0	20
Bromoform	A	25.000	26.530	0.245463	0.2605273	0.1	6.1	20
Bromomethane	A	25.000	16.390	0.406522	0.2665964		-34.4	20 *
n-Butylbenzene	A	25.000	22.560	4.798501	4.331046		-9.7	20
sec-Butylbenzene	A	25.000	24.640	6.314385	6.223511		-1.4	20
tert-Butylbenzene	A	25.000	25.850	4.660614	4.819223		3.4	20
Carbon tetrachloride	A	25.000	23.970	0.449341	0.4308592		-4.1	20
Chlorobenzene	A	25.000	23.820	3.316137	3.160146	0.3	-4.7	20
Chloroethane	A	25.000	22.620	0.5145747	0.4655954		-9.5	20
Chloroform	A	25.000	22.580	0.7571101	0.6838477		-9.7	20
Chloromethane	A	25.000	20.510	0.9407238	0.7716143	0.1	-18.0	20
2-Chlorotoluene	A	25.000	23.700	4.677137	4.433722		-5.2	20
4-Chlorotoluene	A	25.000	23.760	4.223867	4.013964		-5.0	20
Dibromochloromethane	A	25.000	26.240	0.1504286	0.1578816		5.0	20
1,2-Dibromo-3-chloropropane	A	25.000	21.630	7.330085E-02	6.340742E-02		-13.5	20
1,2-Dibromoethane	A	25.000	23.740	0.1293784	0.1228807		-5.0	20
Dibromomethane	A	25.000	24.440	9.576412E-02	0.0936088		-2.3	20
1,2-Dichlorobenzene	A	25.000	24.620	2.15653	2.123572		-1.5	20
1,3-Dichlorobenzene	A	25.000	24.570	2.49992	2.456842		-1.7	20
1,4-Dichlorobenzene	A	25.000	24.510	2.443238	2.394865		-2.0	20



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Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>28JUL33.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713324</u>	Injection Date:	<u>07/28/17</u>
Lab Sample ID:	<u>1713324-CCV3</u>	Injection Time:	<u>19:46</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Dichlorodifluoromethane	A	25.000	26.340	0.4975939	0.5243438		5.4	20
1,1-Dichloroethane	A	25.000	22.890	1.070106	0.9799067	0.1	-8.4	20
1,2-Dichloroethane	A	25.000	23.520	0.4067953	0.3826398		-5.9	20
1,1-Dichloroethene	A	25.000	23.160	0.8069668	0.7477087		-7.3	20
cis-1,2-Dichloroethene	A	25.000	23.510	0.5222008	0.4911062		-6.0	20
trans-1,2-Dichloroethene	A	25.000	23.210	0.5009588	0.4650445		-7.2	20
1,2-Dichloropropane	A	25.000	23.600	0.379403	0.3581441		-5.6	20
1,3-Dichloropropane	A	25.000	23.420	0.2528371	0.2368858		-6.3	20
2,2-Dichloropropane	A	25.000	22.020	0.602219	0.5303565		-11.9	20
1,1-Dichloropropene	A	25.000	23.370	0.6845791	0.6399814		-6.5	20
cis-1,3-Dichloropropene	A	25.000	24.590	0.3594295	0.3534707		-1.7	20
trans-1,3-Dichloropropene	A	25.000	24.940	0.2346113	0.2340794		-0.2	20
Ethylbenzene	A	25.000	23.970	1.948304	1.868095		-4.1	20
Hexachlorobutadiene	A	25.000	23.690	0.86466	0.8194147		-5.2	20
Isopropylbenzene	A	25.000	24.380	5.700983	5.55916		-2.5	20
p-Isopropyltoluene	A	25.000	23.870	5.149437	4.916477		-4.5	20
Methylene chloride	A	25.000	23.280	0.4314876	0.4018092		-6.9	20
Methyl t-butyl ether	A	25.000	23.370	0.603852	0.5645961		-6.5	20
Naphthalene	A	25.000	22.930	1.569043	1.439057		-8.3	20
n-Propylbenzene	A	25.000	22.640	7.403456	6.70595		-9.4	20
Styrene	A	25.000	24.680	3.356924	3.313363		-1.3	20
1,1,1,2-Tetrachloroethane	A	25.000	26.150	0.8160317	0.8537113		4.6	20
1,1,2,2-Tetrachloroethane	A	25.000	23.590	0.5437402	0.5129971	0.3	-5.7	20



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CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>28JUL33.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713324</u>	Injection Date:	<u>07/28/17</u>
Lab Sample ID:	<u>1713324-CCV3</u>	Injection Time:	<u>19:46</u>

COMPOUND	(1) _{CAL} TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Tetrachloroethene	A	25.000	23.750	0.3290699	0.3126377		-5.0	20
Toluene	A	25.000	23.720	0.8662846	0.8218219		-5.1	20
1,2,3-Trichlorobenzene	A	25.000	23.450	1.048181	0.9833866		-6.2	20
1,2,4-Trichlorobenzene	A	25.000	23.630	1.248966	1.180692		-5.5	20
1,1,1-Trichloroethane	A	25.000	23.870	0.6553918	0.6257455		-4.5	20
1,1,2-Trichloroethane	A	25.000	23.280	0.1556498	0.1449576		-6.9	20
Trichloroethene	A	25.000	25.600	0.3434012	0.3515784		2.4	20
Trichlorofluoromethane	A	25.000	24.030	0.6158835	0.5919003		-3.9	20
1,2,3-Trichloropropane	A	25.000	26.120	0.1156016	0.12079		4.5	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	25.000	24.020	0.4228091	0.4062802		-3.9	20
1,2,4-Trimethylbenzene	A	25.000	23.560	4.672745	4.40272		-5.8	20
1,3,5-Trimethylbenzene	A	25.000	24.100	4.717828	4.54838		-3.6	20
Vinyl chloride	A	25.000	23.090	0.7494116	0.6920097		-7.7	20
Total Xylenes	A	75.000	72.030	2.323025	2.23027		-4.0	20
p- & m-Xylenes	A	50.000	47.640	2.383338	2.270862		-4.7	20
o-Xylene	A	25.000	24.390	2.2024	2.149084		-2.4	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>28JUL34.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713324</u>	Injection Date:	<u>07/28/17</u>
Lab Sample ID:	<u>1713324-CCV4</u>	Injection Time:	<u>20:09</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	320.00	301.63	4.120558E-02	3.884046E-02		-5.7	20
Acetonitrile	A	160.00	152.07	1.962376E-02	1.865154E-02		-5.0	20
Allyl chloride	A	32.000	29.710	1.003175	0.9312435		-7.2	20
t-Amyl Methyl ether	A	16.000	14.960	0.6727663	0.6290748		-6.5	20
Benzyl chloride	L	32.000	26.120	0.5754497	0.5362736		-18.4	20
t-Butyl alcohol	A	800.00	735.78	0.0118311	1.088134E-02		-8.0	20
Carbon disulfide	A	32.000	29.080	1.516116	1.377814		-9.1	20
Chloroprene	A	32.000	29.560	1.054363	0.9739955		-7.6	20
Diisopropyl ether	A	16.000	14.470	0.3736986	0.3379622		-9.6	20
Ethanol	A	4000.0	3519.5	1.803136E-03	1.586527E-03		-12.0	20
Ethyl t-butyl ether	A	16.000	15.010	1.222825	1.146835		-6.2	20
2-Hexanone	A	320.00	312.06	7.579232E-02	7.391113E-02		-2.5	20
Methyl ethyl ketone	A	160.00	148.22	7.316144E-02	6.777578E-02		-7.4	20
Methyl isobutyl ketone	A	160.00	156.72	0.1118834	0.1095869		-2.1	20
Vinyl acetate	A	160.00	115.93	0.5836509	0.4228768		-27.5	20 *

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>28JUL63.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713324</u>	Injection Date:	<u>07/29/17</u>
Lab Sample ID:	<u>1713324-CCV5</u>	Injection Time:	<u>07:16</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzene	A	25.000	21.580	2.047739	1.767726		-13.7	20
Bromobenzene	A	25.000	24.790	1.167814	1.15821		-0.8	20
Bromochloromethane	A	25.000	21.920	0.1664346	0.1459563		-12.3	20
Bromodichloromethane	A	25.000	25.160	0.2878825	0.2897317		0.6	20
Bromoform	A	25.000	25.790	0.245463	0.2532095	0.1	3.2	20
Bromomethane	A	25.000	14.600	0.406522	0.2374641		-41.6	20 *
n-Butylbenzene	A	25.000	23.790	4.798501	4.565414		-4.9	20
sec-Butylbenzene	A	25.000	26.130	6.314385	6.598611		4.5	20
tert-Butylbenzene	A	25.000	25.120	4.660614	4.683275		0.5	20
Carbon tetrachloride	A	25.000	24.160	0.449341	0.4341551		-3.4	20
Chlorobenzene	A	25.000	23.870	3.316137	3.166848	0.3	-4.5	20
Chloroethane	A	25.000	20.800	0.5145747	0.42817		-16.8	20
Chloroform	A	25.000	22.250	0.7571101	0.6739		-11.0	20
Chloromethane	A	25.000	19.610	0.9407238	0.7378277	0.1	-21.6	20 *
2-Chlorotoluene	A	25.000	24.930	4.677137	4.664883		-0.3	20
4-Chlorotoluene	A	25.000	25.000	4.223867	4.223433		-0.01	20
Dibromochloromethane	A	25.000	25.910	0.1504286	0.1559277		3.7	20
1,2-Dibromo-3-chloropropane	A	25.000	23.500	7.330085E-02	6.890953E-02		-6.0	20
1,2-Dibromoethane	A	25.000	23.170	0.1293784	0.1199178		-7.3	20
Dibromomethane	A	25.000	23.840	9.576412E-02	9.133575E-02		-4.6	20
1,2-Dichlorobenzene	A	25.000	25.490	2.15653	2.198707		2.0	20
1,3-Dichlorobenzene	A	25.000	26.110	2.49992	2.611285		4.5	20
1,4-Dichlorobenzene	A	25.000	25.720	2.443238	2.513311		2.9	20



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>28JUL63.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713324</u>	Injection Date:	<u>07/29/17</u>
Lab Sample ID:	<u>1713324-CCV5</u>	Injection Time:	<u>07:16</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Dichlorodifluoromethane	A	25.000	21.490	0.4975939	0.4277497		-14.0	20
1,1-Dichloroethane	A	25.000	21.960	1.070106	0.9400835	0.1	-12.2	20
1,2-Dichloroethane	A	25.000	23.080	0.4067953	0.3755844		-7.7	20
1,1-Dichloroethene	A	25.000	22.810	0.8069668	0.7361917		-8.8	20
cis-1,2-Dichloroethene	A	25.000	21.670	0.5222008	0.4526071		-13.3	20
trans-1,2-Dichloroethene	A	25.000	21.930	0.5009588	0.4395145		-12.3	20
1,2-Dichloropropane	A	25.000	23.260	0.379403	0.3529318		-7.0	20
1,3-Dichloropropane	A	25.000	22.730	0.2528371	0.2298874		-9.1	20
2,2-Dichloropropane	A	25.000	16.800	0.602219	0.4047885		-32.8	20 *
1,1-Dichloropropene	A	25.000	22.300	0.6845791	0.6105503		-10.8	20
cis-1,3-Dichloropropene	A	25.000	23.100	0.3594295	0.3321101		-7.6	20
trans-1,3-Dichloropropene	A	25.000	24.170	0.2346113	0.2268202		-3.3	20
Ethylbenzene	A	25.000	24.810	1.948304	1.93342		-0.8	20
Hexachlorobutadiene	A	25.000	27.520	0.86466	0.9518281		10.1	20
Isopropylbenzene	A	25.000	25.370	5.700983	5.784768		1.5	20
p-Isopropyltoluene	A	25.000	25.540	5.149437	5.260143		2.1	20
Methylene chloride	A	25.000	22.470	0.4314876	0.387834		-10.1	20
Methyl t-butyl ether	A	25.000	20.780	0.603852	0.5018659		-16.9	20
Naphthalene	A	25.000	22.690	1.569043	1.424075		-9.2	20
n-Propylbenzene	A	25.000	23.980	7.403456	7.100845		-4.1	20
Styrene	A	25.000	25.050	3.356924	3.363668		0.2	20
1,1,1,2-Tetrachloroethane	A	25.000	27.260	0.8160317	0.8898494		9.0	20
1,1,2,2-Tetrachloroethane	A	25.000	21.300	0.5437402	0.4633136	0.3	-14.8	20



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CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>28JUL63.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713324</u>	Injection Date:	<u>07/29/17</u>
Lab Sample ID:	<u>1713324-CCV5</u>	Injection Time:	<u>07:16</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Tetrachloroethene	A	25.000	25.990	0.3290699	0.3421246		4.0	20
Toluene	A	25.000	24.550	0.8662846	0.8507023		-1.8	20
1,2,3-Trichlorobenzene	A	25.000	24.130	1.048181	1.011875		-3.5	20
1,2,4-Trichlorobenzene	A	25.000	24.140	1.248966	1.20593		-3.4	20
1,1,1-Trichloroethane	A	25.000	23.380	0.6553918	0.6130413		-6.5	20
1,1,2-Trichloroethane	A	25.000	23.410	0.1556498	0.1457587		-6.4	20
Trichloroethene	A	25.000	27.430	0.3434012	0.3767544		9.7	20
Trichlorofluoromethane	A	25.000	24.320	0.6158835	0.5990339		-2.7	20
1,2,3-Trichloropropane	A	25.000	25.160	0.1156016	0.1163402		0.6	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	25.000	22.550	0.4228091	0.3814548		-9.8	20
1,2,4-Trimethylbenzene	A	25.000	24.700	4.672745	4.616477		-1.2	20
1,3,5-Trimethylbenzene	A	25.000	25.700	4.717828	4.84899		2.8	20
Vinyl chloride	A	25.000	22.300	0.7494116	0.6685646		-10.8	20
Total Xylenes	A	75.000	74.190	2.323025	2.297861		-1.1	20
p- & m-Xylenes	A	50.000	49.480	2.383338	2.358586		-1.0	20
o-Xylene	A	25.000	24.710	2.2024	2.176413		-1.2	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>28JUL64.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713324</u>	Injection Date:	<u>07/29/17</u>
Lab Sample ID:	<u>1713324-CCV6</u>	Injection Time:	<u>07:39</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	320.00	313.90	4.120558E-02	0.0404204		-1.9	20
Acetonitrile	A	160.00	149.30	1.962376E-02	1.831165E-02		-6.7	20
Allyl chloride	A	32.000	31.500	1.003175	0.9875835		-1.6	20
t-Amyl Methyl ether	A	16.000	14.910	0.6727663	0.6270481		-6.8	20
Benzyl chloride	L	32.000	32.790	0.5754497	0.6891963		2.5	20
t-Butyl alcohol	A	800.00	752.07	0.0118311	0.0111223		-6.0	20
Carbon disulfide	A	32.000	29.960	1.516116	1.419572		-6.4	20
Chloroprene	A	32.000	31.980	1.054363	1.053582		-0.07	20
Diisopropyl ether	A	16.000	14.540	0.3736986	0.339657		-9.1	20
Ethanol	A	4000.0	3882.3	1.803136E-03	1.750075E-03		-2.9	20
Ethyl t-butyl ether	A	16.000	14.500	1.222825	1.107915		-9.4	20
2-Hexanone	A	320.00	311.20	7.579232E-02	7.370817E-02		-2.7	20
Methyl ethyl ketone	A	160.00	145.96	7.316144E-02	6.674202E-02		-8.8	20
Methyl isobutyl ketone	A	160.00	156.52	0.1118834	0.1094501		-2.2	20
Vinyl acetate	A	160.00	152.81	0.5836509	0.55741		-4.5	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



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Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>29JUL13.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713324</u>	Injection Date:	<u>07/29/17</u>
Lab Sample ID:	<u>1713324-CCV7</u>	Injection Time:	<u>19:08</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzene	A	25.000	23.510	2.047739	1.925468		-6.0	20
Bromobenzene	A	25.000	25.610	1.167814	1.196459		2.5	20
Bromochloromethane	A	25.000	24.350	0.1664346	0.1621029		-2.6	20
Bromodichloromethane	A	25.000	26.380	0.2878825	0.3038005		5.5	20
Bromoform	A	25.000	27.700	0.245463	0.2720094	0.1	10.8	20
Bromomethane	A	25.000	20.360	0.406522	0.3310686		-18.6	20
n-Butylbenzene	A	25.000	25.030	4.798501	4.803651		0.1	20
sec-Butylbenzene	A	25.000	26.440	6.314385	6.67833		5.8	20
tert-Butylbenzene	A	25.000	25.320	4.660614	4.720588		1.3	20
Carbon tetrachloride	A	25.000	26.510	0.449341	0.4764873		6.0	20
Chlorobenzene	A	25.000	24.610	3.316137	3.263916	0.3	-1.6	20
Chloroethane	A	25.000	23.150	0.5145747	0.4765006		-7.4	20
Chloroform	A	25.000	24.070	0.7571101	0.7290623		-3.7	20
Chloromethane	A	25.000	21.330	0.9407238	0.802653	0.1	-14.7	20
2-Chlorotoluene	A	25.000	25.420	4.677137	4.755445		1.7	20
4-Chlorotoluene	A	25.000	25.660	4.223867	4.335711		2.6	20
Dibromochloromethane	A	25.000	27.810	0.1504286	0.167347		11.2	20
1,2-Dibromo-3-chloropropane	A	25.000	25.450	7.330085E-02	7.461046E-02		1.8	20
1,2-Dibromoethane	A	25.000	25.800	0.1293784	0.1335152		3.2	20
Dibromomethane	A	25.000	26.650	9.576412E-02	0.1020684		6.6	20
1,2-Dichlorobenzene	A	25.000	26.580	2.15653	2.2929		6.3	20
1,3-Dichlorobenzene	A	25.000	26.840	2.49992	2.683762		7.4	20
1,4-Dichlorobenzene	A	25.000	26.770	2.443238	2.616157		7.1	20



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CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>29JUL13.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713324</u>	Injection Date:	<u>07/29/17</u>
Lab Sample ID:	<u>1713324-CCV7</u>	Injection Time:	<u>19:08</u>

COMPOUND	(1) _{CAL} TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Dichlorodifluoromethane	A	25.000	22.830	0.4975939	0.4543621		-8.7	20
1,1-Dichloroethane	A	25.000	24.400	1.070106	1.044386	0.1	-2.4	20
1,2-Dichloroethane	A	25.000	25.660	0.4067953	0.4174814		2.6	20
1,1-Dichloroethene	A	25.000	24.560	0.8069668	0.792836		-1.8	20
cis-1,2-Dichloroethene	A	25.000	23.560	0.5222008	0.4920288		-5.8	20
trans-1,2-Dichloroethene	A	25.000	23.960	0.5009588	0.4801081		-4.2	20
1,2-Dichloropropane	A	25.000	24.490	0.379403	0.3716313		-2.0	20
1,3-Dichloropropane	A	25.000	24.440	0.2528371	0.2472014		-2.2	20
2,2-Dichloropropane	A	25.000	24.750	0.602219	0.5962685		-1.0	20
1,1-Dichloropropene	A	25.000	24.320	0.6845791	0.6660813		-2.7	20
cis-1,3-Dichloropropene	A	25.000	26.500	0.3594295	0.3810343		6.0	20
trans-1,3-Dichloropropene	A	25.000	27.550	0.2346113	0.2585744		10.2	20
Ethylbenzene	A	25.000	24.990	1.948304	1.94736		-0.05	20
Hexachlorobutadiene	A	25.000	27.970	0.86466	0.9674309		11.9	20
Isopropylbenzene	A	25.000	25.750	5.700983	5.872212		3.0	20
p-Isopropyltoluene	A	25.000	26.130	5.149437	5.381946		4.5	20
Methylene chloride	A	25.000	23.250	0.4314876	0.401249		-7.0	20
Methyl t-butyl ether	A	25.000	23.350	0.603852	0.5640362		-6.6	20
Naphthalene	A	25.000	24.660	1.569043	1.547683		-1.4	20
n-Propylbenzene	A	25.000	24.120	7.403456	7.143616		-3.5	20
Styrene	A	25.000	25.610	3.356924	3.438473		2.4	20
1,1,1,2-Tetrachloroethane	A	25.000	27.360	0.8160317	0.8932096		9.5	20
1,1,2,2-Tetrachloroethane	A	25.000	24.740	0.5437402	0.5380329	0.3	-1.0	20



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CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>29JUL13.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713324</u>	Injection Date:	<u>07/29/17</u>
Lab Sample ID:	<u>1713324-CCV7</u>	Injection Time:	<u>19:08</u>

COMPOUND	(1) CAL TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Tetrachloroethene	A	25.000	26.800	0.3290699	0.3527796		7.2	20
Toluene	A	25.000	25.740	0.8662846	0.8920847		3.0	20
1,2,3-Trichlorobenzene	A	25.000	26.380	1.048181	1.106182		5.5	20
1,2,4-Trichlorobenzene	A	25.000	26.060	1.248966	1.302167		4.3	20
1,1,1-Trichloroethane	A	25.000	26.050	0.6553918	0.6828873		4.2	20
1,1,2-Trichloroethane	A	25.000	25.370	0.1556498	0.1579774		1.5	20
Trichloroethene	A	25.000	27.130	0.3434012	0.3726847		8.5	20
Trichlorofluoromethane	A	25.000	26.240	0.6158835	0.6464053		5.0	20
1,2,3-Trichloropropane	A	25.000	27.430	0.1156016	0.1268559		9.7	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	25.000	24.990	0.4228091	0.4227011		-0.03	20
1,2,4-Trimethylbenzene	A	25.000	25.280	4.672745	4.724814		1.1	20
1,3,5-Trimethylbenzene	A	25.000	26.350	4.717828	4.973225		5.4	20
Vinyl chloride	A	25.000	24.020	0.7494116	0.7198875		-3.9	20
Total Xylenes	A	75.000	74.820	2.323025	2.317054		-0.3	20
p- & m-Xylenes	A	50.000	49.740	2.383338	2.37086		-0.5	20
o-Xylene	A	25.000	25.080	2.2024	2.209442		0.3	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



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Project: Alameda
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CONTINUING CALIBRATION CHECK

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Instrument ID:	<u>MS-V5</u>	Calibration:	<u>1707017</u>
Lab File ID:	<u>29JUL14.D</u>	Calibration Date:	<u>07/18/17 00:46</u>
Sequence:	<u>1713324</u>	Injection Date:	<u>07/29/17</u>
Lab Sample ID:	<u>1713324-CCV8</u>	Injection Time:	<u>19:31</u>

COMPOUND	(1) _{CAL} TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT (2)	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	320.00	371.47	4.120558E-02	4.783352E-02		16.1	20
Acetonitrile	A	160.00	180.69	1.962376E-02	2.216184E-02		12.9	20
Allyl chloride	A	32.000	33.010	1.003175	1.034853		3.2	20
t-Amyl Methyl ether	A	16.000	17.290	0.6727663	0.7268828		8.0	20
Benzyl chloride	L	32.000	32.550	0.5754497	0.6836308		1.7	20
t-Butyl alcohol	A	800.00	927.82	0.0118311	1.372138E-02		16.0	20
Carbon disulfide	A	32.000	31.260	1.516116	1.480866		-2.3	20
Chloroprene	A	32.000	33.490	1.054363	1.103507		4.7	20
Diisopropyl ether	A	16.000	15.720	0.3736986	0.3672617		-1.7	20
Ethanol	A	4000.0	4883.3	1.803136E-03	2.201322E-03		22.1	20 *
Ethyl t-butyl ether	A	16.000	16.970	1.222825	1.296979		6.1	20
2-Hexanone	A	320.00	365.64	7.579232E-02	8.660172E-02		14.3	20
Methyl ethyl ketone	A	160.00	177.10	7.316144E-02	8.098083E-02		10.7	20
Methyl isobutyl ketone	A	160.00	183.55	0.1118834	0.1283534		14.7	20
Vinyl acetate	A	160.00	145.78	0.5836509	0.5317928		-8.9	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits for beginning CCVs. For ending CCVs, limit is 50.

(1): Cal Type (Calibration Type): A = Average; L = Linear Regression; Q = Quadratic Regression

(2): % Diff (of Response Factors) reported when Cal Type = A; %Drift (of Conc) reported when Cal Type = L or Q



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

SURROGATE STANDARD RECOVERY AND RT SUMMARY EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1712752</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1707017</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Cal Standard (1712752-CAL1) Lab File ID: 20JUL03.D Analyzed: 07/20/17 08:32								
1,2-Dichloroethane-d4 (Surrogate)	10.000	101		6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.6		8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	96.8		10.35	10.34333	0.0067	+/-1.0	
Cal Standard (1712752-CAL2) Lab File ID: 20JUL05.D Analyzed: 07/20/17 09:18								
1,2-Dichloroethane-d4 (Surrogate)	10.000	101		6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	99.8		8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	101		10.34	10.34333	-0.0033	+/-1.0	
Cal Standard (1712752-CAL3) Lab File ID: 20JUL06.D Analyzed: 07/20/17 09:42								
1,2-Dichloroethane-d4 (Surrogate)	10.000	98.6		6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.9		8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	101		10.34	10.34333	-0.0033	+/-1.0	
Cal Standard (1712752-CAL4) Lab File ID: 20JUL07.D Analyzed: 07/20/17 10:05								
1,2-Dichloroethane-d4 (Surrogate)	10.000	98.9		6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	101		8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	103		10.34	10.34333	-0.0033	+/-1.0	
Cal Standard (1712752-CAL5) Lab File ID: 20JUL08.D Analyzed: 07/20/17 10:28								
1,2-Dichloroethane-d4 (Surrogate)	10.000	94.0		6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	100		8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	101		10.34	10.34333	-0.0033	+/-1.0	
Cal Standard (1712752-CAL6) Lab File ID: 20JUL09.D Analyzed: 07/20/17 10:51								
1,2-Dichloroethane-d4 (Surrogate)	10.000	92.4		6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	100		8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	102		10.35	10.34333	0.0067	+/-1.0	



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1713324</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1707017</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (1713324-ICV1)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	100	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.4	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	104	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Initial Cal Blank (1713324-ICB1)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	106	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.6	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.2	85 - 114	10.35	10.34333	0.0067	+/-1.0	
Calibration Check (1713324-CCV3)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	96.3	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.9	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.6	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Calibration Blank (1713324-CCB2)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	97.4	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	96.6	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.1	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
26PZ01_170724 (1720267-01)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	118	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.2	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	105	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
26PZ02_170724 (1720267-02)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	108	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.6	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	95.1	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
26PZ03_170724 (1720267-03)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	109	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.7	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	102	85 - 114	10.35	10.34333	0.0067	+/-1.0	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1713324</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1707017</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
27EW-01_170724 (1720267-04)					Lab File ID: 28JUL54.D	Analyzed: 07/29/17 03:49		
1,2-Dichloroethane-d4 (Surrogate)	10.000	97.5	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	99.1	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	97.4	85 - 114	10.35	10.34333	0.0067	+/-1.0	
27EW-05_170724 (1720267-05)					Lab File ID: 28JUL55.D	Analyzed: 07/29/17 04:12		
1,2-Dichloroethane-d4 (Surrogate)	10.000	94.3	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.3	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	95.0	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
27EW-19_170724 (1720267-06)					Lab File ID: 28JUL56.D	Analyzed: 07/29/17 04:35		
1,2-Dichloroethane-d4 (Surrogate)	10.000	102	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	100	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.3	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
27EW-20_170724 (1720267-07)					Lab File ID: 28JUL57.D	Analyzed: 07/29/17 04:58		
1,2-Dichloroethane-d4 (Surrogate)	10.000	102	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	96.7	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.4	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
27MW06_170724 (1720267-08)					Lab File ID: 28JUL58.D	Analyzed: 07/29/17 05:21		
1,2-Dichloroethane-d4 (Surrogate)	10.000	106	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	96.5	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	96.9	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
27MW07_170724 (1720267-09)					Lab File ID: 28JUL59.D	Analyzed: 07/29/17 05:44		
1,2-Dichloroethane-d4 (Surrogate)	10.000	103	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.6	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	93.5	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
27MW09_170724 (1720267-11)					Lab File ID: 28JUL60.D	Analyzed: 07/29/17 06:07		
1,2-Dichloroethane-d4 (Surrogate)	10.000	104	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	101	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.0	85 - 114	10.34	10.34333	-0.0033	+/-1.0	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

SURROGATE STANDARD RECOVERY AND RT SUMMARY EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1713324</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1707017</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (1713324-CCV5)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	93.7	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	100	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	94.8	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Calibration Blank (1713324-CCB3)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	105	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.7	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	91.0	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Blank (B G2380-BLK1)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	101	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.6	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	100	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
27MW08_170724 (1720267-10)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	103	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	96.5	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	96.6	85 - 114	10.35	10.34333	0.0067	+/-1.0	
S13-TT-MW02_170724 (1720267-12)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	106	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	96.3	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	95.3	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
EB22_170724 (1720267-13)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	106	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	96.1	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.6	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
EB23_170724 (1720267-14)								
1,2-Dichloroethane-d4 (Surrogate)	10.000	105	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.5	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	94.8	85 - 114	10.34	10.34333	-0.0033	+/-1.0	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

SURROGATE STANDARD RECOVERY AND RT SUMMARY EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1713324</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1707017</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
TB14_170724 (1720267-15)					Lab File ID: 28JUL71.D	Analyzed: 07/29/17 10:19		
1,2-Dichloroethane-d4 (Surrogate)	10.000	105	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	99.5	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	95.9	85 - 114	10.35	10.34333	0.0067	+/-1.0	
LCS (B G2380-BS1)					Lab File ID: 28JUL72.D	Analyzed: 07/29/17 10:42		
1,2-Dichloroethane-d4 (Surrogate)	10.000	96.3	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	99.8	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	102	85 - 114	10.35	10.34333	0.0067	+/-1.0	
Matrix Spike (B G2380-MS1)					Lab File ID: 28JUL73.D	Analyzed: 07/29/17 11:05		
1,2-Dichloroethane-d4 (Surrogate)	10.000	102	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.8	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	100	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Matrix Spike Dup (B G2380-MSD1)					Lab File ID: 28JUL74.D	Analyzed: 07/29/17 11:28		
1,2-Dichloroethane-d4 (Surrogate)	10.000	98.0	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	98.1	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.0	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Calibration Check (1713324-CCV7)					Lab File ID: 29JUL13.D	Analyzed: 07/29/17 19:08		
1,2-Dichloroethane-d4 (Surrogate)	10.000	96.2	81 - 118	6.91	6.916667	-0.0067	+/-1.0	
Toluene-d8 (Surrogate)	10.000	100	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	98.0	85 - 114	10.34	10.34333	-0.0033	+/-1.0	
Calibration Blank (1713324-CCB4)					Lab File ID: 29JUL15.D	Analyzed: 07/29/17 19:54		
1,2-Dichloroethane-d4 (Surrogate)	10.000	99.4	81 - 118	6.92	6.916667	0.0033	+/-1.0	
Toluene-d8 (Surrogate)	10.000	97.9	89 - 112	8.6	8.6	0.0000	+/-1.0	
4-Bromofluorobenzene (Surrogate)	10.000	99.8	85 - 114	10.34	10.34333	-0.0033	+/-1.0	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INTERNAL STANDARD AREA AND RT SUMMARY EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1712752</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1707017</u>

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Cal Standard (1712752-CALD)			Lab File ID: 17JUL50.D			Analyzed: 07/18/17 00:00			
Pentafluorobenzene (IS)	203330	6.57	187618	6.58	108	50 - 200	-0.0100	+/-0.50	
Cal Standard (1712752-CALE)			Lab File ID: 17JUL51.D			Analyzed: 07/18/17 00:23			
Pentafluorobenzene (IS)	203353	6.57	187618	6.58	108	50 - 200	-0.0100	+/-0.50	
Cal Standard (1712752-CALF)			Lab File ID: 17JUL52.D			Analyzed: 07/18/17 00:46			
Pentafluorobenzene (IS)	209806	6.57	187618	6.58	112	50 - 200	-0.0100	+/-0.50	
Cal Standard (1712752-CALG)			Lab File ID: 17JUL53.D			Analyzed: 07/18/17 01:09			
Pentafluorobenzene (IS)	214428	6.57	187618	6.58	114	50 - 200	-0.0100	+/-0.50	
Cal Standard (1712752-CALH)			Lab File ID: 17JUL54.D			Analyzed: 07/18/17 01:32			
Pentafluorobenzene (IS)	210761	6.57	187618	6.58	112	50 - 200	-0.0100	+/-0.50	
Cal Standard (1712752-CALI)			Lab File ID: 17JUL55.D			Analyzed: 07/18/17 01:55			
Pentafluorobenzene (IS)	228564	6.57	187618	6.58	122	50 - 200	-0.0100	+/-0.50	
Cal Standard (1712752-CAL1)			Lab File ID: 20JUL03.D			Analyzed: 07/20/17 08:32			
Pentafluorobenzene (IS)	217011	6.57	187618	6.58	116	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	90897	9.61	72968	9.61	125	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	336200	7.38	281102	7.38	120	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CAL2)			Lab File ID: 20JUL05.D			Analyzed: 07/20/17 09:18			
Pentafluorobenzene (IS)	219386	6.58	187618	6.58	117	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	89283	9.61	72968	9.61	122	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	341653	7.38	281102	7.38	122	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CAL3)			Lab File ID: 20JUL06.D			Analyzed: 07/20/17 09:42			
Pentafluorobenzene (IS)	160100	6.58	187618	6.58	85	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	66101	9.62	72968	9.61	91	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	249503	7.38	281102	7.38	89	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CAL4)			Lab File ID: 20JUL07.D			Analyzed: 07/20/17 10:05			
Pentafluorobenzene (IS)	187618	6.58	187618	6.58	100	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	72968	9.61	72968	9.61	100	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	281102	7.38	281102	7.38	100	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INTERNAL STANDARD AREA AND RT SUMMARY EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1712752</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1707017</u>

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Cal Standard (1712752-CAL5)			Lab File ID: 20JUL08.D			Analyzed: 07/20/17 10:28			
Pentafluorobenzene (IS)	185328	6.58	187618	6.58	99	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	75612	9.62	72968	9.61	104	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	283937	7.38	281102	7.38	101	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CAL6)			Lab File ID: 20JUL09.D			Analyzed: 07/20/17 10:51			
Pentafluorobenzene (IS)	190235	6.57	187618	6.58	101	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	79131	9.61	72968	9.61	108	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	291095	7.38	281102	7.38	104	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CAL7)			Lab File ID: 20JUL15.D			Analyzed: 07/20/17 13:09			
Pentafluorobenzene (IS)	185398	6.57	187618	6.58	99	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	74464	9.62	72968	9.61	102	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	284772	7.38	281102	7.38	101	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CAL8)			Lab File ID: 20JUL17.D			Analyzed: 07/20/17 13:55			
Pentafluorobenzene (IS)	181609	6.57	187618	6.58	97	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	74489	9.61	72968	9.61	102	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	282158	7.38	281102	7.38	100	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CAL9)			Lab File ID: 20JUL18.D			Analyzed: 07/20/17 14:18			
Pentafluorobenzene (IS)	177625	6.58	187618	6.58	95	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	69283	9.62	72968	9.61	95	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	272450	7.38	281102	7.38	97	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CALA)			Lab File ID: 20JUL19.D			Analyzed: 07/20/17 14:41			
Pentafluorobenzene (IS)	178179	6.58	187618	6.58	95	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	71971	9.61	72968	9.61	99	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	269523	7.38	281102	7.38	96	50 - 200	0.0000	+/-0.50	
Cal Standard (1712752-CALB)			Lab File ID: 20JUL20.D			Analyzed: 07/20/17 15:04			
Pentafluorobenzene (IS)	174621	6.57	187618	6.58	93	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	69099	9.62	72968	9.61	95	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	263233	7.38	281102	7.38	94	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INTERNAL STANDARD AREA AND RT SUMMARY EPA-8260B

Laboratory: BC Laboratories SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Sequence: 1712752 Instrument: MS-V5

Matrix: Water Calibration: 1707017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Cal Standard (1712752-CALC)			Lab File ID: 20JUL21.D			Analyzed: 07/20/17 15:27			
Pentafluorobenzene (IS)	191859	6.57	187618	6.58	102	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	76272	9.62	72968	9.61	105	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	287684	7.38	281102	7.38	102	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INTERNAL STANDARD AREA AND RT SUMMARY EPA-8260B

Laboratory: BC Laboratories SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Sequence: 1713324 Instrument: MS-V5

Matrix: Water Calibration: 1707017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (1713324-ICV1)			Lab File ID: 20JUL12.D			Analyzed: 07/20/17 12:00			
Pentafluorobenzene (IS)	184644	6.58	187618	6.58	98	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	74559	9.62	72968	9.61	102	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	285117	7.38	281102	7.38	101	50 - 200	0.0000	+/-0.50	
Initial Cal Blank (1713324-ICB1)			Lab File ID: 20JUL14.D			Analyzed: 07/20/17 12:46			
Pentafluorobenzene (IS)	181261	6.57	184644	6.58	98	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	73863	9.61	74559	9.62	99	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	281231	7.38	285117	7.38	99	50 - 200	0.0000	+/-0.50	
Initial Cal Check (1713324-ICV2)			Lab File ID: 20JUL24.D			Analyzed: 07/20/17 16:36			
Pentafluorobenzene (IS)	179876	6.58	187618	6.58	96	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	74706	9.62	72968	9.61	102	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	278423	7.38	281102	7.38	99	50 - 200	0.0000	+/-0.50	
Initial Cal Blank (1713324-ICB2)			Lab File ID: 20JUL26.D			Analyzed: 07/20/17 17:22			
Pentafluorobenzene (IS)	171673	6.57	179876	6.58	95	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	71809	9.62	74706	9.62	96	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	268403	7.38	278423	7.38	96	50 - 200	0.0000	+/-0.50	
Calibration Check (1713324-CCV3)			Lab File ID: 28JUL33.D			Analyzed: 07/28/17 19:46			
Pentafluorobenzene (IS)	176427	6.57	187618	6.58	94	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	71039	9.62	72968	9.61	97	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	268244	7.38	281102	7.38	95	50 - 200	0.0000	+/-0.50	
Calibration Check (1713324-CCV4)			Lab File ID: 28JUL34.D			Analyzed: 07/28/17 20:09			
Pentafluorobenzene (IS)	177616	6.57	187618	6.58	95	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	72072	9.62	72968	9.61	99	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	263542	7.38	281102	7.38	94	50 - 200	0.0000	+/-0.50	
Calibration Blank (1713324-CCB2)			Lab File ID: 28JUL35.D			Analyzed: 07/28/17 20:32			
Pentafluorobenzene (IS)	174164	6.57	177616	6.57	98	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	67477	9.62	72072	9.62	94	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	256996	7.38	263542	7.38	98	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INTERNAL STANDARD AREA AND RT SUMMARY EPA-8260B

Laboratory: BC Laboratories SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Sequence: 1713324 Instrument: MS-V5

Matrix: Water Calibration: 1707017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
26PZ01_170724 (1720267-01)			Lab File ID: 28JUL51.D			Analyzed: 07/29/17 02:40			
Pentafluorobenzene (IS)	159665	6.57	177616	6.57	90	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	65236	9.61	72072	9.62	91	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	237447	7.38	263542	7.38	90	50 - 200	0.0000	+/-0.50	
26PZ02_170724 (1720267-02)			Lab File ID: 28JUL52.D			Analyzed: 07/29/17 03:03			
Pentafluorobenzene (IS)	152256	6.58	177616	6.57	86	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	64061	9.61	72072	9.62	89	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	220797	7.38	263542	7.38	84	50 - 200	0.0000	+/-0.50	
26PZ03_170724 (1720267-03)			Lab File ID: 28JUL53.D			Analyzed: 07/29/17 03:26			
Pentafluorobenzene (IS)	159704	6.58	177616	6.57	90	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	65025	9.61	72072	9.62	90	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	237414	7.38	263542	7.38	90	50 - 200	0.0000	+/-0.50	
27EW-01_170724 (1720267-04)			Lab File ID: 28JUL54.D			Analyzed: 07/29/17 03:49			
Pentafluorobenzene (IS)	165003	6.57	177616	6.57	93	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	65921	9.61	72072	9.62	91	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	238536	7.38	263542	7.38	91	50 - 200	0.0000	+/-0.50	
27EW-05_170724 (1720267-05)			Lab File ID: 28JUL55.D			Analyzed: 07/29/17 04:12			
Pentafluorobenzene (IS)	165950	6.58	177616	6.57	93	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	64429	9.61	72072	9.62	89	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	242355	7.38	263542	7.38	92	50 - 200	0.0000	+/-0.50	
27EW-19_170724 (1720267-06)			Lab File ID: 28JUL56.D			Analyzed: 07/29/17 04:35			
Pentafluorobenzene (IS)	157773	6.57	177616	6.57	89	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	61476	9.62	72072	9.62	85	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	230486	7.38	263542	7.38	87	50 - 200	0.0000	+/-0.50	
27EW-20_170724 (1720267-07)			Lab File ID: 28JUL57.D			Analyzed: 07/29/17 04:58			
Pentafluorobenzene (IS)	156138	6.57	177616	6.57	88	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	58613	9.61	72072	9.62	81	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	229047	7.38	263542	7.38	87	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INTERNAL STANDARD AREA AND RT SUMMARY EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1713324</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1707017</u>

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
27MW06_170724 (1720267-08)			Lab File ID: 28JUL58.D			Analyzed: 07/29/17 05:21			
Pentafluorobenzene (IS)	157522	6.57	177616	6.57	89	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	61874	9.61	72072	9.62	86	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	236211	7.38	263542	7.38	90	50 - 200	0.0000	+/-0.50	
27MW07_170724 (1720267-09)			Lab File ID: 28JUL59.D			Analyzed: 07/29/17 05:44			
Pentafluorobenzene (IS)	159882	6.58	177616	6.57	90	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	63321	9.61	72072	9.62	88	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	238644	7.38	263542	7.38	91	50 - 200	0.0000	+/-0.50	
27MW09_170724 (1720267-11)			Lab File ID: 28JUL60.D			Analyzed: 07/29/17 06:07			
Pentafluorobenzene (IS)	159751	6.57	177616	6.57	90	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	62913	9.61	72072	9.62	87	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	232620	7.38	263542	7.38	88	50 - 200	0.0000	+/-0.50	
Calibration Check (1713324-CCV5)			Lab File ID: 28JUL63.D			Analyzed: 07/29/17 07:16			
Pentafluorobenzene (IS)	167483	6.58	187618	6.58	89	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	62331	9.62	72968	9.61	85	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	235658	7.38	281102	7.38	84	50 - 200	0.0000	+/-0.50	
Calibration Check (1713324-CCV6)			Lab File ID: 28JUL64.D			Analyzed: 07/29/17 07:39			
Pentafluorobenzene (IS)	162953	6.57	187618	6.58	87	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	64183	9.62	72968	9.61	88	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	237313	7.38	281102	7.38	84	50 - 200	0.0000	+/-0.50	
Calibration Blank (1713324-CCB3)			Lab File ID: 28JUL65.D			Analyzed: 07/29/17 08:02			
Pentafluorobenzene (IS)	155536	6.57	162953	6.57	95	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	64189	9.61	64183	9.62	100	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	236490	7.38	237313	7.38	100	50 - 200	0.0000	+/-0.50	
Blank (B G2380-BLK1)			Lab File ID: 28JUL66.D			Analyzed: 07/29/17 08:25			
Pentafluorobenzene (IS)	159258	6.57	162953	6.57	98	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	60434	9.62	64183	9.62	94	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	237571	7.38	237313	7.38	100	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INTERNAL STANDARD AREA AND RT SUMMARY EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1713324</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration:	<u>1707017</u>

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
27MW08_170724 (1720267-10)			Lab File ID: 28JUL67.D			Analyzed: 07/29/17 08:48			
Pentafluorobenzene (IS)	145509	6.58	162953	6.57	89	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	56923	9.61	64183	9.62	89	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	211349	7.38	237313	7.38	89	50 - 200	0.0000	+/-0.50	
S13-TT-MW02_170724 (1720267-12)			Lab File ID: 28JUL68.D			Analyzed: 07/29/17 09:11			
Pentafluorobenzene (IS)	159019	6.57	162953	6.57	98	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	62697	9.62	64183	9.62	98	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	231425	7.38	237313	7.38	98	50 - 200	0.0000	+/-0.50	
EB22_170724 (1720267-13)			Lab File ID: 28JUL69.D			Analyzed: 07/29/17 09:34			
Pentafluorobenzene (IS)	155506	6.57	162953	6.57	95	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	61496	9.62	64183	9.62	96	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	233178	7.38	237313	7.38	98	50 - 200	0.0000	+/-0.50	
EB23_170724 (1720267-14)			Lab File ID: 28JUL70.D			Analyzed: 07/29/17 09:57			
Pentafluorobenzene (IS)	171202	6.58	162953	6.57	105	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	69440	9.62	64183	9.62	108	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	247958	7.38	237313	7.38	104	50 - 200	0.0000	+/-0.50	
TB14_170724 (1720267-15)			Lab File ID: 28JUL71.D			Analyzed: 07/29/17 10:19			
Pentafluorobenzene (IS)	174716	6.57	162953	6.57	107	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	69202	9.61	64183	9.62	108	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	258428	7.38	237313	7.38	109	50 - 200	0.0000	+/-0.50	
LCS (B G2380-BS1)			Lab File ID: 28JUL72.D			Analyzed: 07/29/17 10:42			
Pentafluorobenzene (IS)	180484	6.58	162953	6.57	111	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	69619	9.61	64183	9.62	108	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	263522	7.38	237313	7.38	111	50 - 200	0.0000	+/-0.50	
Matrix Spike (B G2380-MS1)			Lab File ID: 28JUL73.D			Analyzed: 07/29/17 11:05			
Pentafluorobenzene (IS)	185201	6.57	162953	6.57	114	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	69225	9.62	64183	9.62	108	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	271846	7.38	237313	7.38	115	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**INTERNAL STANDARD AREA AND RT SUMMARY
EPA-8260B**

Laboratory: BC Laboratories SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Sequence: 1713324 Instrument: MS-V5

Matrix: Water Calibration: 1707017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Matrix Spike Dup (B G2380-MSD1) Lab File ID: 28JUL74.D Analyzed: 07/29/17 11:28									
Pentafluorobenzene (IS)	197024	6.57	162953	6.57	121	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	74653	9.61	64183	9.62	116	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	279582	7.38	237313	7.38	118	50 - 200	0.0000	+/-0.50	
Calibration Check (1713324-CCV7) Lab File ID: 29JUL13.D Analyzed: 07/29/17 19:08									
Pentafluorobenzene (IS)	180626	6.57	187618	6.58	96	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	72971	9.62	72968	9.61	100	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	263149	7.38	281102	7.38	94	50 - 200	0.0000	+/-0.50	
Calibration Check (1713324-CCV8) Lab File ID: 29JUL14.D Analyzed: 07/29/17 19:31									
Pentafluorobenzene (IS)	158448	6.57	187618	6.58	84	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5 (IS)	62675	9.62	72968	9.61	86	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene (IS)	236027	7.38	281102	7.38	84	50 - 200	0.0000	+/-0.50	
Calibration Blank (1713324-CCB4) Lab File ID: 29JUL15.D Analyzed: 07/29/17 19:54									
Pentafluorobenzene (IS)	188729	6.57	158448	6.57	119	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (IS)	71584	9.62	62675	9.62	114	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene (IS)	271364	7.38	236027	7.38	115	50 - 200	0.0000	+/-0.50	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION STANDARDS EPA-8260B

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1712752 Instrument: MS-V5
Calibration: 1707017

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
7F24002	8260 V5 BFB 50NG	1712752-TUN2	17JUL49.D	07/17/17 23:37
7G20063	8260 V5 1712752 TPPH IC1	1712752-CALD	17JUL50.D	07/18/17 00:00
7G20064	8260 V5 1712752 TPPH IC2	1712752-CALE	17JUL51.D	07/18/17 00:23
7G20065	8260 V5 1712752 TPPH IC3	1712752-CALF	17JUL52.D	07/18/17 00:46
7G20066	8260 V5 1712752 TPPH IC4	1712752-CALG	17JUL53.D	07/18/17 01:09
7G20067	8260 V5 1712752 TPPH IC5	1712752-CALH	17JUL54.D	07/18/17 01:32
7G20068	8260 V5 1712752 TPPH IC6	1712752-CALI	17JUL55.D	07/18/17 01:55
7F24002	8260 V5 BFB 50NG	1712752-TUN1	20JUL02.D	07/20/17 08:09
7G20044	8260 V5 1712752 IC1	1712752-CAL1	20JUL03.D	07/20/17 08:32
7G20045	8260 V5 1712752 IC2	1712752-CAL2	20JUL05.D	07/20/17 09:18
7G20046	8260 V5 1712752 IC3	1712752-CAL3	20JUL06.D	07/20/17 09:42
7G20047	8260 V5 1712752 IC4	1712752-CAL4	20JUL07.D	07/20/17 10:05
7G20048	8260 V5 1712752 IC5	1712752-CAL5	20JUL08.D	07/20/17 10:28
7G20049	8260 V5 1712752 IC6	1712752-CAL6	20JUL09.D	07/20/17 10:51
7G20056	8260 V5 1712752 XIC1	1712752-CAL7	20JUL15.D	07/20/17 13:09
7G20057	8260 V5 1712752 XIC2	1712752-CAL8	20JUL17.D	07/20/17 13:55
7G20058	8260 V5 1712752 XIC3	1712752-CAL9	20JUL18.D	07/20/17 14:18
7G20059	8260 V5 1712752 XIC4	1712752-CALA	20JUL19.D	07/20/17 14:41
7G20060	8260 V5 1712752 XIC5	1712752-CALB	20JUL20.D	07/20/17 15:04
7G20061	8260 V5 1712752 XIC6	1712752-CALC	20JUL21.D	07/20/17 15:27



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>07/18/17 00:46</u>

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF										
Benzene	0.5	2.205326	1	2.188152	10	2.178289	25	1.917287	50	1.970505	100	1.826874
Bromobenzene	0.5	1.219182	1	1.216805	10	1.171389	25	1.141355	50	1.141528	100	1.116624
Bromochloromethane	0.5	0.1707748	1	0.1767661	10	0.1705309	25	0.1543114	50	0.1624719	100	0.1637527
Bromodichloromethane	0.5	0.2888162	1	0.2612885	10	0.2951588	25	0.2850666	50	0.2984239	100	0.2985407
Bromoform	0.5	0.2057274	1	0.2048542	10	0.237243	25	0.2574389	50	0.2735148	100	0.2939998
Bromomethane	0.5	0.4056016	1	0.4036265	10	0.4194379	25	0.3840293	50	0.4138878	100	0.4125492
n-Butylbenzene	0.5	5.079156	1	5.143868	10	5.21983	25	4.812707	50	4.647704	100	3.887741
sec-Butylbenzene	0.5	6.710012	1	6.711804	10	7.08428	25	6.565459	50	6.055303	100	4.759451
tert-Butylbenzene	0.5	4.756373	1	4.697087	10	4.878822	25	4.997994	50	4.368193	100	4.265216
Carbon tetrachloride	0.5	0.4114077	1	0.4033074	10	0.4811493	25	0.4442985	50	0.4811005	100	0.4747828
Chlorobenzene	0.5	3.718715	1	3.505819	10	3.379041	25	3.237474	50	3.173113	100	2.882659
Chloroethane	0.5	0.5656856	1	0.5508556	10	0.5391568	25	0.46994	50	0.4862093	100	0.4756012
Chloroform	0.5	0.7884393	1	0.8118567	10	0.7797252	25	0.7046062	50	0.7411616	100	0.7168718
Chloromethane	0.5	1.10575	1	0.9995168	10	0.9853529	25	0.8464923	50	0.8754543	100	0.8317765
2-Chlorotoluene	0.5	4.687283	1	5.164477	10	5.044175	25	4.655328	50	4.583238	100	3.928318
4-Chlorotoluene	0.5	4.382323	1	4.481816	10	4.64285	25	4.255438	50	4.026009	100	3.554765
Dibromochloromethane	0.5	0.1380726	1	0.1181608	10	0.1512567	25	0.1562949	50	0.1665531	100	0.1722335
1,2-Dibromo-3-chloropropane	0.5		1	6.507398E-02	10	6.963586E-02	25	7.759018E-02	50	7.440618E-02	100	7.979806E-02
1,2-Dibromoethane	0.5	0.1390244	1	0.1129216	10	0.1365675	25	0.1245114	50	0.1307515	100	0.1324942
Dibromomethane	0.5	8.863772E-02	1	0.0959453	10	0.103105	25	9.070871E-02	50	0.0977421	100	9.844587E-02
1,2-Dichlorobenzene	0.5	2.246939	1	2.140833	10	2.244323	25	2.128007	50	2.159181	100	2.0199
1,3-Dichlorobenzene	0.5	2.530337	1	2.604527	10	2.703227	25	2.506085	50	2.452092	100	2.203254
1,4-Dichlorobenzene	0.5	2.395899	1	2.476843	10	2.57751	25	2.471593	50	2.453264	100	2.28432
Dichlorodifluoromethane	0.5	0.4018229	1	0.4651619	10	0.5834478	25	0.4982614	50	0.527767	100	0.5091024
1,1-Dichloroethane	0.5	1.128238	1	1.080744	10	1.129469	25	1.011244	50	1.063002	100	1.007938



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>07/18/17 00:46</u>

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF										
1,2-Dichloroethane	0.5	0.3840358	1	0.4451059	10	0.4391068	25	0.3850974	50	0.4008601	100	0.3865656
1,1-Dichloroethene	0.5	0.7938768	1	0.8264429	10	0.8811618	25	0.7704058	50	0.8053397	100	0.7645738
cis-1,2-Dichloroethene	0.5	0.5379451	1	0.5619319	10	0.5358463	25	0.4858169	50	0.5074463	100	0.5042185
trans-1,2-Dichloroethene	0.5	0.5264249	1	0.5006701	10	0.5310431	25	0.4693174	50	0.4927404	100	0.4855568
Total 1,2-Dichloroethene	1	0.532185	2	0.531301	20	0.5334447	50	0.4775672	100	0.5000933	200	0.4948876
1,2-Dichloropropane	0.5	0.3746579	1	0.39104	10	0.3895945	25	0.3719575	50	0.37968	100	0.369488
1,3-Dichloropropane	0.5	0.2577037	1	0.2665863	10	0.2493798	25	0.2444977	50	0.2531674	100	0.2456878
2,2-Dichloropropane	0.5	0.5992323	1	0.5587868	10	0.64	25	0.578	50	0.6240741	100	0.613221
1,1-Dichloropropene	0.5	0.685956	1	0.7289435	10	0.7278951	25	0.6364805	50	0.6776871	100	0.6505123
cis-1,3-Dichloropropene	0.5	0.3328971	1	0.3317694	10	0.3690938	25	0.3615001	50	0.3821143	100	0.3792023
trans-1,3-Dichloropropene	0.5	0.1857228	1	0.2073449	10	0.2445983	25	0.2456873	50	0.260574	100	0.2637407
Total 1,3-Dichloropropene	1	0.2593099	2	0.2695571	20	0.306846	50	0.3035937	100	0.3213442	200	0.3214715
Ethylbenzene	0.5	1.933397	1	2.1032	10	2.063766	25	1.930792	50	1.927625	100	1.731043
Hexachlorobutadiene	0.5	0.9727494	1	0.8039604	10	0.8502897	25	0.8577897	50	0.8736814	100	0.8294891
Isopropylbenzene	0.5	6.01384	1	6.197708	10	6.294564	25	5.807965	50	5.443937	100	4.447883
p-Isopropyltoluene	0.5	5.675215	1	5.416149	10	5.722833	25	5.274992	50	4.860035	100	3.9474
Methylene chloride	0.5	0.6828225	1	0.4693098	10	0.4590943	25	0.4047202	50	0.4129435	100	0.4113701
Methyl t-butyl ether	0.5	0.5949007	1	0.621872	10	0.627589	25	0.5721711	50	0.6097697	100	0.5968097
Naphthalene	0.5	1.449333	1	1.295095	10	1.630989	25	1.613008	50	1.707123	100	1.718713
n-Propylbenzene	0.5	7.843163	1	7.570982	10	7.957535	25	7.067525	50	6.578078	100	5.048542
Styrene	0.5	3.322662	1	3.513659	10	3.615951	25	3.422815	50	3.346784	100	2.919674
1,1,1,2-Tetrachloroethane	0.5	0.7348977	1	0.7534469	10	0.8415455	25	0.8637923	50	0.8877083	100	0.8147995
1,1,2,2-Tetrachloroethane	0.5	0.4990264	1	0.5452326	10	0.5402339	25	0.5664291	50	0.5528699	100	0.5586496
Tetrachloroethene	0.5	0.3402142	1	0.3382379	10	0.3457113	25	0.312086	50	0.3232717	100	0.3148982
Toluene	0.5	0.9042237	1	0.868103	10	0.9403254	25	0.8511615	50	0.847993	100	0.7859008
1,2,3-Trichlorobenzene	0.5	1.097286	1	0.9971663	10	1.056308	25	1.020776	50	1.070089	100	1.047459



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>07/18/17 00:46</u>

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,2,4-Trichlorobenzene	0.5	1.251086	1	1.203365	10	1.227546	25	1.250998	50	1.293432	100	1.267368
1,1,1-Trichloroethane	0.5	0.6254982	1	0.6510899	10	0.6849219	25	0.6308968	50	0.6766241	100	0.6633196
1,1,2-Trichloroethane	0.5	0.1444973	1	0.1708459	10	0.1625271	25	0.1509673	50	0.1515498	100	0.1535111
Trichloroethene	0.5	0.3308745	1	0.3413405	10	0.3603684	25	0.3346927	50	0.3492275	100	0.3439039
Trichlorofluoromethane	0.5	0.5650405	1	0.6137128	10	0.6705809	25	0.6016331	50	0.629348	100	0.6149857
1,2,3-Trichloropropane	0.5	0.0503867	1	9.329884E-02	10	0.1102858	25	0.1262033	50	0.1224488	100	0.1257712
1,1,2-Trichloro-1,2,2-trifluoroethan	0.5	0.3727	1	0.3929148	10	0.477208	25	0.4199171	50	0.4389687	100	0.435146
1,2,4-Trimethylbenzene	0.5	4.913914	1	5.052026	10	5.080891	25	4.637967	50	4.517373	100	3.8343
1,3,5-Trimethylbenzene	0.5	4.969581	1	4.782097	10	5.249436	25	4.834843	50	4.626234	100	3.844775
Vinyl chloride	0.5	0.7736935	1	0.7846444	10	0.7935103	25	0.7054398	50	0.7348614	100	0.7043199
Total Xylenes	1.5	2.506427	3	2.392803	30	2.534773	75	2.325878	150	2.240477	300	1.937794
Total Trihalomethanes	2	8333	4	8151	40	6297.45	100	6876.23	200	7251.58	400	7416.965
Acetone												
Acetonitrile												
Acrolein												
Acrylonitrile												
Allyl chloride												
t-Amyl Alcohol												
t-Amyl Methyl ether												
Benzyl chloride												
t-Butyl alcohol												
Carbon disulfide												
2-Chloroethyl vinyl ether	2	9.159726E-02	4	9.464281E-02	40	0.1049256	100	0.0975998	200	0.1009555	400	9.820488E-02
Chloroprene												
Chlorotrifluoroethene												
Cyclohexane												



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INITIAL CALIBRATION DATA

EPA-8260B

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Calibration: 1707017 Instrument: MS-V5
Matrix: Water Calibration Date: 07/18/17 00:46

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF										
Cyclohexanone												
trans-1,4-Dichloro-2-butene												
1,2-Dichlorotrifluoroethane												
2,2-Dichloro-1,1,1-trifluoroethane												
Diethyl ether												
Diisopropyl ether												
1,4-Dioxane												
Ethanol												
Ethyl Amyl Ketone												
Ethyl methacrylate												
Ethyl t-butyl ether												
Hexachloroethane	0.5	0.5014467	1	0.4756785	10	0.6755117	25	0.7837627	50	0.8954399	100	0.9270817
Hexane												
2-Hexanone												
Isobutanol												
Isopropyl alcohol												
Methacrylonitrile												
Methyl acetate												
Methylcyclohexane												
Methyl ethyl ketone												
5-Methyl-3-heptanone												
Methyl iodide												
Methyl isobutyl ketone												
Methyl methacrylate												
Pentachloroethane												
Propionitrile												



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INITIAL CALIBRATION DATA EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>07/18/17 00:46</u>

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Tetrahydrofuran												
Vinyl acetate												
p- & m-Xylenes	1	2.665545	2	2.484628	20	2.59251	50	2.358552	100	2.274933	200	1.923861
o-Xylene	0.5	2.188191	1	2.209155	10	2.419298	25	2.260531	50	2.171565	100	1.965659
Total Purgeable Petroleum Hydrocarbons												
1,2-Dichloroethane-d4 (Surrogate)	10	0.3012474	10	0.3018151	10	0.2951343	10	0.2961709	10	0.2815387	10	0.2765317
Toluene-d8 (Surrogate)	10	1.220306	10	1.23463	10	1.223885	10	1.247597	10	1.242184	10	1.240574
4-Bromofluorobenzene (Surrogate)	10	1.433469	10	1.499199	10	1.502352	10	1.520913	10	1.496218	10	1.506919
Benzene	0.5	2.205326	1	2.188152	10	2.178289	25	1.917287	50	1.970505	100	1.826874
Bromobenzene	0.5	1.219182	1	1.216805	10	1.171389	25	1.141355	50	1.141528	100	1.116624
Bromoform	0.5	0.1707748	1	0.1767661	10	0.1705309	25	0.1543114	50	0.1624719	100	0.1637527
Bromochloromethane	0.5	0.2888162	1	0.2612885	10	0.2951588	25	0.2850666	50	0.2984239	100	0.2985407
Bromodichloromethane	0.5	0.2057274	1	0.2048542	10	0.237243	25	0.2574389	50	0.2735148	100	0.2939998
Bromomethane	0.5	0.4056016	1	0.4036265	10	0.4194379	25	0.3840293	50	0.4138878	100	0.4125492
n-Butylbenzene	0.5	5.079156	1	5.143868	10	5.21983	25	4.812707	50	4.647704	100	3.887741
sec-Butylbenzene	0.5	6.710012	1	6.711804	10	7.08428	25	6.565459	50	6.055303	100	4.759451
tert-Butylbenzene	0.5	4.756373	1	4.697087	10	4.878822	25	4.997994	50	4.368193	100	4.265216
Carbon tetrachloride	0.5	0.4114077	1	0.4033074	10	0.4811493	25	0.4442985	50	0.4811005	100	0.4747828
Chlorobenzene	0.5	3.718715	1	3.505819	10	3.379041	25	3.237474	50	3.173113	100	2.882659
Chloroethane	0.5	0.5656856	1	0.5508556	10	0.5391568	25	0.46994	50	0.4862093	100	0.4756012
Chloroform	0.5	0.7884393	1	0.8118567	10	0.7797252	25	0.7046062	50	0.7411616	100	0.7168718
Chloromethane	0.5	1.10575	1	0.9995168	10	0.9853529	25	0.8464923	50	0.8754543	100	0.8317765
2-Chlorotoluene	0.5	4.687283	1	5.164477	10	5.044175	25	4.655328	50	4.583238	100	3.928318
4-Chlorotoluene	0.5	4.382323	1	4.481816	10	4.64285	25	4.255438	50	4.026009	100	3.554765
Dibromochloromethane	0.5	0.1380726	1	0.1181608	10	0.1512567	25	0.1562949	50	0.1665531	100	0.1722335
1,2-Dibromo-3-chloropropane	0.5		1	6.507398E-02	10	6.963586E-02	25	7.759018E-02	50	7.440618E-02	100	7.979806E-02



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>07/18/17 00:46</u>

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,2-Dibromoethane	0.5	0.1390244	1	0.1129216	10	0.1365675	25	0.1245114	50	0.1307515	100	0.1324942
Dibromomethane	0.5	8.863772E-02	1	0.0959453	10	0.103105	25	9.070871E-02	50	0.0977421	100	9.844587E-02
1,2-Dichlorobenzene	0.5	2.246939	1	2.140833	10	2.244323	25	2.128007	50	2.159181	100	2.0199
1,3-Dichlorobenzene	0.5	2.530337	1	2.604527	10	2.703227	25	2.506085	50	2.452092	100	2.203254
1,4-Dichlorobenzene	0.5	2.395899	1	2.476843	10	2.57751	25	2.471593	50	2.453264	100	2.28432
Dichlorodifluoromethane	0.5	0.4018229	1	0.4651619	10	0.5834478	25	0.4982614	50	0.527767	100	0.5091024
1,1-Dichloroethane	0.5	1.128238	1	1.080744	10	1.129469	25	1.011244	50	1.063002	100	1.007938
1,2-Dichloroethane	0.5	0.3840358	1	0.4451059	10	0.4391068	25	0.3850974	50	0.4008601	100	0.3865656
1,1-Dichloroethene	0.5	0.7938768	1	0.8264429	10	0.8811618	25	0.7704058	50	0.8053397	100	0.7645738
cis-1,2-Dichloroethene	0.5	0.5379451	1	0.5619319	10	0.5358463	25	0.4858169	50	0.5074463	100	0.5042185
trans-1,2-Dichloroethene	0.5	0.5264249	1	0.5006701	10	0.5310431	25	0.4693174	50	0.4927404	100	0.4855568
Total 1,2-Dichloroethene	1	0.532185	2	0.531301	20	0.5334447	50	0.4775672	100	0.5000933	200	0.4948876
1,2-Dichloropropane	0.5	0.3746579	1	0.39104	10	0.3895945	25	0.3719575	50	0.37968	100	0.369488
1,3-Dichloropropane	0.5	0.2577037	1	0.2665863	10	0.2493798	25	0.2444977	50	0.2531674	100	0.2456878
2,2-Dichloropropane	0.5	0.5992323	1	0.5587868	10	0.64	25	0.578	50	0.6240741	100	0.613221
1,1-Dichloropropene	0.5	0.685956	1	0.7289435	10	0.7278951	25	0.6364805	50	0.6776871	100	0.6505123
cis-1,3-Dichloropropene	0.5	0.3328971	1	0.3317694	10	0.3690938	25	0.3615001	50	0.3821143	100	0.3792023
trans-1,3-Dichloropropene	0.5	0.1857228	1	0.2073449	10	0.2445983	25	0.2456873	50	0.260574	100	0.2637407
Total 1,3-Dichloropropene	1	0.2593099	2	0.2695571	20	0.306846	50	0.3035937	100	0.3213442	200	0.3214715
Ethylbenzene	0.5	1.933397	1	2.1032	10	2.063766	25	1.930792	50	1.927625	100	1.731043
Hexachlorobutadiene	0.5	0.9727494	1	0.8039604	10	0.8502897	25	0.8577897	50	0.8736814	100	0.8294891
Isopropylbenzene	0.5	6.01384	1	6.197708	10	6.294564	25	5.807965	50	5.443937	100	4.447883
p-Isopropyltoluene	0.5	5.675215	1	5.416149	10	5.722833	25	5.274992	50	4.860035	100	3.9474
Methylene chloride	0.5	0.6828225	1	0.4693098	10	0.4590943	25	0.4047202	50	0.4129435	100	0.4113701
Methyl t-butyl ether	0.5	0.5949007	1	0.621872	10	0.627589	25	0.5721711	50	0.6097697	100	0.5968097
Naphthalene	0.5	1.449333	1	1.295095	10	1.630989	25	1.613008	50	1.707123	100	1.718713



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>07/18/17 00:46</u>

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
n-Propylbenzene	0.5	7.843163	1	7.570982	10	7.957535	25	7.067525	50	6.578078	100	5.048542
Styrene	0.5	3.322662	1	3.513659	10	3.615951	25	3.422815	50	3.346784	100	2.919674
1,1,1,2-Tetrachloroethane	0.5	0.7348977	1	0.7534469	10	0.8415455	25	0.8637923	50	0.8877083	100	0.8147995
1,1,2,2-Tetrachloroethane	0.5	0.4990264	1	0.5452326	10	0.5402339	25	0.5664291	50	0.5528699	100	0.5586496
Tetrachloroethene	0.5	0.3402142	1	0.3382379	10	0.3457113	25	0.312086	50	0.3232717	100	0.3148982
Toluene	0.5	0.9042237	1	0.868103	10	0.9403254	25	0.8511615	50	0.847993	100	0.7859008
1,2,3-Trichlorobenzene	0.5	1.097286	1	0.9971663	10	1.056308	25	1.020776	50	1.070089	100	1.047459
1,2,4-Trichlorobenzene	0.5	1.251086	1	1.203365	10	1.227546	25	1.250998	50	1.293432	100	1.267368
1,1,1-Trichloroethane	0.5	0.6254982	1	0.6510899	10	0.6849219	25	0.6308968	50	0.6766241	100	0.6633196
1,1,2-Trichloroethane	0.5	0.1444973	1	0.1708459	10	0.1625271	25	0.1509673	50	0.1515498	100	0.1535111
Trichloroethene	0.5	0.3308745	1	0.3413405	10	0.3603684	25	0.3346927	50	0.3492275	100	0.3439039
Trichlorofluoromethane	0.5	0.5650405	1	0.6137128	10	0.6705809	25	0.6016331	50	0.629348	100	0.6149857
1,2,3-Trichloropropane	0.5	0.9503867	1	9.329884E-02	10	0.1102858	25	0.1262033	50	0.1224488	100	0.1257712
1,1,2-Trichloro-1,2,2-trifluoroethan	0.5	0.3727	1	0.3929148	10	0.477208	25	0.4199171	50	0.4389687	100	0.435146
1,2,4-Trimethylbenzene	0.5	4.913914	1	5.052026	10	5.080891	25	4.637967	50	4.517373	100	3.8343
1,3,5-Trimethylbenzene	0.5	4.969581	1	4.782097	10	5.249436	25	4.834843	50	4.626234	100	3.844775
Vinyl chloride	0.5	0.7736935	1	0.7846444	10	0.7935103	25	0.7054398	50	0.7348614	100	0.7043199
Total Xylenes	1.5	2.506427	3	2.392803	30	2.534773	75	2.325878	150	2.240477	300	1.937794
Total Trihalomethanes	2	8333	4	8151	40	6297.45	100	6876.23	200	7251.58	400	7416.965
Acetone												
Acetonitrile												
Acrolein												
Acrylonitrile												
Allyl chloride												
t-Amyl Alcohol												
t-Amyl Methyl ether												



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA

EPA-8260B

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Calibration: 1707017 Instrument: MS-V5
Matrix: Water Calibration Date: 07/18/17 00:46

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Benzyl chloride												
t-Butyl alcohol												
Carbon disulfide												
2-Chloroethyl vinyl ether	2	9.159726E-02	4	9.464281E-02	40	0.1049256	100	0.0975998	200	0.1009555	400	9.820488E-02
Chloroprene												
Chlorotrifluoroethene												
Cyclohexane												
Cyclohexanone												
trans-1,4-Dichloro-2-butene												
1,2-Dichlorotrifluoroethane												
2,2-Dichloro-1,1,1-trifluoroethane												
Diethyl ether												
Diisopropyl ether												
1,4-Dioxane												
Ethanol												
Ethyl Amyl Ketone												
Ethyl methacrylate												
Ethyl t-butyl ether												
Hexachloroethane	0.5	0.5014467	1	0.4756785	10	0.6755117	25	0.7837627	50	0.8954399	100	0.9270817
Hexane												
2-Hexanone												
Isobutanol												
Isopropyl alcohol												
Methacrylonitrile												
Methyl acetate												
Methylcyclohexane												



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INITIAL CALIBRATION DATA EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>07/18/17 00:46</u>

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF										
Methyl ethyl ketone												
5-Methyl-3-heptanone												
Methyl iodide												
Methyl isobutyl ketone												
Methyl methacrylate												
Pentachloroethane												
Propionitrile												
Tetrahydrofuran												
Vinyl acetate												
p- & m-Xylenes	1	2.665545	2	2.484628	20	2.59251	50	2.358552	100	2.274933	200	1.923861
o-Xylene	0.5	2.188191	1	2.209155	10	2.419298	25	2.260531	50	2.171565	100	1.965659
Total Purgeable Petroleum Hydrocarbons												
1,2-Dichloroethane-d4 (Surrogate)	10	0.3012474	10	0.3018151	10	0.2951343	10	0.2961709	10	0.2815387	10	0.2765317
Toluene-d8 (Surrogate)	10	1.220306	10	1.23463	10	1.223885	10	1.247597	10	1.242184	10	1.240574
4-Bromofluorobenzene (Surrogate)	10	1.433469	10	1.499199	10	1.502352	10	1.520913	10	1.496218	10	1.506919



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INITIAL CALIBRATION DATA (Continued)**EPA-8260B**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Calibration: 1707017 Instrument: MS-V5
Matrix: Water Calibration Date: 07/18/17 00:46

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF										
Benzene												
Bromobenzene												
Bromoform												
Bromochloromethane												
Bromodichloromethane												
Bromomethane												
n-Butylbenzene												
sec-Butylbenzene												
tert-Butylbenzene												
Carbon tetrachloride												
Chlorobenzene												
Chloroethane												
Chloroform												
Chloromethane												
2-Chlorotoluene												
4-Chlorotoluene												
Dibromochloromethane												
1,2-Dibromo-3-chloropropane												
1,2-Dibromoethane												
Dibromomethane												
1,2-Dichlorobenzene												
1,3-Dichlorobenzene												
1,4-Dichlorobenzene												
Dichlorodifluoromethane												
1,1-Dichloroethane												



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INITIAL CALIBRATION DATA (Continued)**EPA-8260B**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Calibration: 1707017 Instrument: MS-V5
Matrix: Water Calibration Date: 07/18/17 00:46

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF										
1,2-Dichloroethane												
1,1-Dichloroethene												
cis-1,2-Dichloroethene												
trans-1,2-Dichloroethene												
Total 1,2-Dichloroethene												
1,2-Dichloropropane												
1,3-Dichloropropane												
2,2-Dichloropropane												
1,1-Dichloropropene												
cis-1,3-Dichloropropene												
trans-1,3-Dichloropropene												
Total 1,3-Dichloropropene												
Ethylbenzene												
Hexachlorobutadiene												
Isopropylbenzene												
p-Isopropyltoluene												
Methylene chloride												
Methyl t-butyl ether												
Naphthalene												
n-Propylbenzene												
Styrene												
1,1,1,2-Tetrachloroethane												
1,1,2,2-Tetrachloroethane												
Tetrachloroethene												
Toluene												



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INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>07/18/17 00:46</u>

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF										
1,2,3-Trichlorobenzene												
1,2,4-Trichlorobenzene												
1,1,1-Trichloroethane												
1,1,2-Trichloroethane												
Trichloroethene												
Trichlorofluoromethane												
1,2,3-Trichloropropane												
1,1,2-Trichloro-1,2,2-trifluoroethan												
1,2,4-Trimethylbenzene												
1,3,5-Trimethylbenzene												
Vinyl chloride												
Total Xylenes												
Total Trihalomethanes												
Acetone	16	5.913292E-02	64	4.599338E-02	160	4.103835E-02	320	4.031304E-02	480	4.108004E-02	800	3.760307E-02
Acetonitrile	8	2.695552E-02	32	1.960255E-02	80	1.920197E-02	160	2.144367E-02	240	2.002026E-02	400	1.785035E-02
Acrolein	10	1.972513E-02	40	1.667181E-02	100	1.701337E-02	200	1.765107E-02	320	1.949597E-02	500	1.878359E-02
Acrylonitrile	4	6.941822E-02	16	6.623777E-02	40	0.0658311	80	7.210025E-02	128	6.893948E-02	200	6.511422E-02
Allyl chloride	1.6	1.050814	6.4	1.041274	16	0.9506615	32	1.007182	48	1.029587	80	0.9395298
t-Amyl Alcohol	50	8.032449E-03	800	9.524721E-03	1250	9.905137E-03	2500	9.740474E-03	5000	1.046225E-02	10000	9.871505E-03
t-Amyl Methyl ether	0.8	0.7471763	3.2	0.6725988	8	0.6496974	16	0.6548471	24	0.6800442	40	0.6322338
Benzyl chloride	1.6	0.4382151	6.4	0.4365577	16	0.5300994	32	0.633176	48	0.70099	80	0.7136597
t-Butyl alcohol	40	1.143621E-02	160	1.211876E-02	400	1.136453E-02	800	1.229585E-02	1200	1.204151E-02	2000	1.172973E-02
Carbon disulfide	1.6	1.612511	6.4	1.590032	16	1.436133	32	1.534608	48	1.516942	80	1.40647
2-Chloroethyl vinyl ether												
Chloroprene	1.6	1.071512	6.4	1.112796	16	1.008223	32	1.07318	48	1.076242	80	0.9842234



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INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>07/18/17 00:46</u>

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF										
Chlorotrifluoroethene	0.5		8		12.5		25		50		100	
Cyclohexane	0.5	1.482325	8	1.263236	12.5	1.329052	25	1.267676	50	1.334388	100	1.175706
Cyclohexanone	20	6.358106E-02	80	6.628495E-02	200	6.822814E-02	400	6.908269E-02	640	7.092473E-02	1000	5.899832E-02
trans-1,4-Dichloro-2-butene	4	8.074372E-02	16	8.737028E-02	40	9.320468E-02	80	0.1065481	120	0.123592	200	0.1157037
1,2-Dichlorotrifluoroethane	0.5	0.6859837	8	0.6588055	12.5	0.6793278	25	0.638394	50	0.676567	100	0.6141745
2,2-Dichloro-1,1,1-trifluoroethane	0.5	0.9083162	8	0.9597198	12.5	0.9983099	25	0.9543751	50	0.985508	100	0.8832252
Diethyl ether	0.5	0.2111134	8	0.2536562	12.5	0.2639223	25	0.2561604	50	0.2694052	100	0.246137
Diisopropyl ether	0.8	0.4214582	3.2	0.3704387	8	0.3696763	16	0.3639739	24	0.3752221	40	0.3414226
1,4-Dioxane	100	9.86052E-04	400	8.876232E-04	1000	8.434942E-04	2000	9.681734E-04	3200	8.77229E-04	5000	8.925488E-04
Ethanol	200	1.798563E-03	800	0.0016678	2000	1.751246E-03	4000	1.971753E-03	6400	1.840862E-03	10000	1.78859E-03
Ethyl Amyl Ketone	0.5	0.3451332	8	0.3841675	12.5	0.397604	25	0.4054744	50	0.4408544	100	0.4016782
Ethyl methacrylate	4	0.1854642	16	0.167105	40	0.168185	80	0.1715498	120	0.174425	200	0.1580578
Ethyl t-butyl ether	0.8	1.363755	3.2	1.239683	8	1.201105	16	1.195171	24	1.20526	40	1.131976
Hexachloroethane												
Hexane	0.5	0.4991424	8	0.6434221	12.5	0.6767831	25	0.6679351	50	0.7140733	100	0.6554412
2-Hexanone	16	8.885617E-02	64	7.654621E-02	160	7.424711E-02	320	7.624129E-02	480	7.405345E-02	800	0.0648097
Isobutanol	20	4.592822E-03	80	5.358352E-03	200	5.606193E-03	400	6.207101E-03	640	6.227684E-03	1000	0.0060091
Isopropyl alcohol	40	6.806977E-03	160	8.425725E-03	400	8.390992E-03	800	9.223449E-03	1280	8.736689E-03	2000	8.285694E-03
Methacrylonitrile	8	7.891132E-02	32	6.557701E-02	80	0.0643209	160	6.549839E-02	240	6.559205E-02	400	6.185011E-02
Methyl acetate	5	0.1224393	80	0.1260496	125	0.1300511	250	0.123479	500	0.1292004	1000	0.1133594
Methylcyclohexane	0.5	0.535165	8	0.6134506	12.5	0.6454469	25	0.6244736	50	0.6667758	100	0.5818325
Methyl ethyl ketone	8	8.272069E-02	32	0.0760769	80	0.071924	160	7.022643E-02	240	7.220876E-02	400	6.581187E-02
5-Methyl-3-heptanone	1	0.4077138	16	0.4610412	25	0.5059596	50	0.4652818	100	0.4843645	200	0.4239197
Methyl iodide	1.6	0.538234	6.4	0.5614139	16	0.5443807	32	0.6237074	48	0.6434877	80	0.6257662
Methyl isobutyl ketone	8	0.128875	32	0.1125832	80	0.108463	160	0.1101708	240	0.111068	400	0.1001404



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INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>07/18/17 00:46</u>

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF										
Methyl methacrylate	4	8.296988E-02	16	7.179267E-02	40	7.090842E-02	80	7.345802E-02	120	0.0766102	200	7.223151E-02
Pentachloroethane	0.8	0.4131191	3.2	0.3821454	8	0.3937293	16	0.3502018	24	0.4275086	40	0.4334585
Propionitrile	20	2.373542E-02	80	2.597889E-02	200	2.474398E-02	400	2.572553E-02	640	2.474225E-02	1000	2.244508E-02
Tetrahydrofuran	16	5.489204E-02	64	5.170965E-02	160	0.0475095	320	0.0481561	480	4.794157E-02	800	4.440709E-02
Vinyl acetate	8	0.691573	32	0.6018218	80	0.5827319	160	0.5569901	240	0.5691374	400	0.499651
p- & m-Xylenes												
o-Xylene												
Total Purgeable Petroleum Hydrocarbons												
1,2-Dichloroethane-d4 (Surrogate)												
Toluene-d8 (Surrogate)												
4-Bromofluorobenzene (Surrogate)												
Benzene												
Bromobenzene												
Bromochloromethane												
Bromodichloromethane												
Bromoform												
Bromomethane												
n-Butylbenzene												
sec-Butylbenzene												
tert-Butylbenzene												
Carbon tetrachloride												
Chlorobenzene												
Chloroethane												
Chloroform												
Chloromethane												



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA (Continued)**EPA-8260B**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Calibration: 1707017 Instrument: MS-V5
Matrix: Water Calibration Date: 07/18/17 00:46

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF										
2-Chlorotoluene												
4-Chlorotoluene												
Dibromochloromethane												
1,2-Dibromo-3-chloropropane												
1,2-Dibromoethane												
Dibromomethane												
1,2-Dichlorobenzene												
1,3-Dichlorobenzene												
1,4-Dichlorobenzene												
Dichlorodifluoromethane												
1,1-Dichloroethane												
1,2-Dichloroethane												
1,1-Dichloroethene												
cis-1,2-Dichloroethene												
trans-1,2-Dichloroethene												
Total 1,2-Dichloroethene												
1,2-Dichloropropane												
1,3-Dichloropropane												
2,2-Dichloropropane												
1,1-Dichloropropene												
cis-1,3-Dichloropropene												
trans-1,3-Dichloropropene												
Total 1,3-Dichloropropene												
Ethylbenzene												
Hexachlorobutadiene												



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>07/18/17 00:46</u>

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF										
Isopropylbenzene												
p-Isopropyltoluene												
Methylene chloride												
Methyl t-butyl ether												
Naphthalene												
n-Propylbenzene												
Styrene												
1,1,1,2-Tetrachloroethane												
1,1,2,2-Tetrachloroethane												
Tetrachloroethene												
Toluene												
1,2,3-Trichlorobenzene												
1,2,4-Trichlorobenzene												
1,1,1-Trichloroethane												
1,1,2-Trichloroethane												
Trichloroethene												
Trichlorofluoromethane												
1,2,3-Trichloropropane												
1,1,2-Trichloro-1,2,2-trifluoroethan												
1,2,4-Trimethylbenzene												
1,3,5-Trimethylbenzene												
Vinyl chloride												
Total Xylenes												
Total Trihalomethanes												
Acetone	16	5.913292E-02	64	4.599338E-02	160	4.103835E-02	320	4.031304E-02	480	4.108004E-02	800	3.760307E-02



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>07/18/17 00:46</u>

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF										
Acetonitrile	8	2.695552E-02	32	1.960255E-02	80	1.920197E-02	160	2.144367E-02	240	2.002026E-02	400	1.785035E-02
Acrolein	10	1.972513E-02	40	1.667181E-02	100	1.701337E-02	200	1.765107E-02	320	1.949597E-02	500	1.878359E-02
Acrylonitrile	4	6.941822E-02	16	6.623777E-02	40	0.0658311	80	7.210025E-02	128	6.893948E-02	200	6.511422E-02
Allyl chloride	1.6	1.050814	6.4	1.041274	16	0.9506615	32	1.007182	48	1.029587	80	0.9395298
t-Amyl Alcohol	50	8.032449E-03	800	9.524721E-03	1250	9.905137E-03	2500	9.740474E-03	5000	1.046225E-02	10000	9.871505E-03
t-Amyl Methyl ether	0.8	0.7471763	3.2	0.6725988	8	0.6496974	16	0.6548471	24	0.6800442	40	0.6322338
Benzyl chloride	1.6	0.4382151	6.4	0.4365577	16	0.5300994	32	0.633176	48	0.70099	80	0.7136597
t-Butyl alcohol	40	1.143621E-02	160	1.211876E-02	400	1.136453E-02	800	1.229585E-02	1200	1.204151E-02	2000	1.172973E-02
Carbon disulfide	1.6	1.612511	6.4	1.590032	16	1.436133	32	1.534608	48	1.516942	80	1.40647
2-Chloroethyl vinyl ether												
Chloroprene	1.6	1.071512	6.4	1.112796	16	1.008223	32	1.07318	48	1.076242	80	0.9842234
Chlorotrifluoroethene	0.5		8		12.5		25		50		100	
Cyclohexane	0.5	1.482325	8	1.263236	12.5	1.329052	25	1.267676	50	1.334388	100	1.175706
Cyclohexanone	20	6.358106E-02	80	6.628495E-02	200	6.822814E-02	400	6.908269E-02	640	7.092473E-02	1000	5.899832E-02
trans-1,4-Dichloro-2-butene	4	8.074372E-02	16	8.737028E-02	40	9.320468E-02	80	0.1065481	120	0.123592	200	0.1157037
1,2-Dichlorotrifluoroethane	0.5	0.6859837	8	0.6588055	12.5	0.6793278	25	0.638394	50	0.676567	100	0.6141745
2,2-Dichloro-1,1,1-trifluoroethane	0.5	0.9083162	8	0.9597198	12.5	0.9983099	25	0.9543751	50	0.985508	100	0.8832252
Diethyl ether	0.5	0.2111134	8	0.2536562	12.5	0.2639223	25	0.2561604	50	0.2694052	100	0.246137
Diisopropyl ether	0.8	0.4214582	3.2	0.3704387	8	0.3696763	16	0.3639739	24	0.3752221	40	0.3414226
1,4-Dioxane	100	9.86052E-04	400	8.876232E-04	1000	8.434942E-04	2000	9.681734E-04	3200	8.77229E-04	5000	8.925488E-04
Ethanol	200	1.798563E-03	800	0.0016678	2000	1.751246E-03	4000	1.971753E-03	6400	1.840862E-03	10000	1.78859E-03
Ethyl Amyl Ketone	0.5	0.3451332	8	0.3841675	12.5	0.397604	25	0.4054744	50	0.4408544	100	0.4016782
Ethyl methacrylate	4	0.1854642	16	0.167105	40	0.168185	80	0.1715498	120	0.174425	200	0.1580578
Ethyl t-butyl ether	0.8	1.363755	3.2	1.239683	8	1.201105	16	1.195171	24	1.20526	40	1.131976
Hexachloroethane												



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>07/18/17 00:46</u>

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF										
Hexane	0.5	0.4991424	8	0.6434221	12.5	0.6767831	25	0.6679351	50	0.7140733	100	0.6554412
2-Hexanone	16	8.885617E-02	64	7.654621E-02	160	7.424711E-02	320	7.624129E-02	480	7.405345E-02	800	0.0648097
Isobutanol	20	4.592822E-03	80	5.358352E-03	200	5.606193E-03	400	6.207101E-03	640	6.227684E-03	1000	0.0060091
Isopropyl alcohol	40	6.806977E-03	160	8.425725E-03	400	8.390992E-03	800	9.223449E-03	1280	8.736689E-03	2000	8.285694E-03
Methacrylonitrile	8	7.891132E-02	32	6.557701E-02	80	0.0643209	160	6.549839E-02	240	6.559205E-02	400	6.185011E-02
Methyl acetate	5	0.1224393	80	0.1260496	125	0.1300511	250	0.123479	500	0.1292004	1000	0.1133594
Methylcyclohexane	0.5	0.535165	8	0.6134506	12.5	0.6454469	25	0.6244736	50	0.6667758	100	0.5818325
Methyl ethyl ketone	8	8.272069E-02	32	0.0760769	80	0.071924	160	7.022643E-02	240	7.220876E-02	400	6.581187E-02
5-Methyl-3-heptanone	1	0.4077138	16	0.4610412	25	0.5059596	50	0.4652818	100	0.4843645	200	0.4239197
Methyl iodide	1.6	0.538234	6.4	0.5614139	16	0.5443807	32	0.6237074	48	0.6434877	80	0.6257662
Methyl isobutyl ketone	8	0.128875	32	0.1125832	80	0.108463	160	0.1101708	240	0.111068	400	0.1001404
Methyl methacrylate	4	8.296988E-02	16	7.179267E-02	40	7.090842E-02	80	7.345802E-02	120	0.0766102	200	7.223151E-02
Pentachloroethane	0.8	0.4131191	3.2	0.3821454	8	0.3937293	16	0.3502018	24	0.4275086	40	0.4334585
Propionitrile	20	2.373542E-02	80	2.597889E-02	200	2.474398E-02	400	2.572553E-02	640	2.474225E-02	1000	2.244508E-02
Tetrahydrofuran	16	5.489204E-02	64	5.170965E-02	160	0.0475095	320	0.0481561	480	4.794157E-02	800	4.440709E-02
Vinyl acetate	8	0.691573	32	0.6018218	80	0.5827319	160	0.5569901	240	0.5691374	400	0.499651
p- & m-Xylenes												
o-Xylene												
Total Purgeable Petroleum Hydrocarbons												
1,2-Dichloroethane-d4 (Surrogate)												
Toluene-d8 (Surrogate)												
4-Bromofluorobenzene (Surrogate)												



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA (Continued)**EPA-8260B**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Calibration: 1707017 Instrument: MS-V5
Matrix: Water Calibration Date: 07/18/17 00:46

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF										
Benzene												
Bromobenzene												
Bromochloromethane												
Bromodichloromethane												
Bromoform												
Bromomethane												
n-Butylbenzene												
sec-Butylbenzene												
tert-Butylbenzene												
Carbon tetrachloride												
Chlorobenzene												
Chloroethane												
Chloroform												
Chloromethane												
2-Chlorotoluene												
4-Chlorotoluene												
Dibromochloromethane												
1,2-Dibromo-3-chloropropane												
1,2-Dibromoethane												
Dibromomethane												
1,2-Dichlorobenzene												
1,3-Dichlorobenzene												
1,4-Dichlorobenzene												
Dichlorodifluoromethane												



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA (Continued)**EPA-8260B**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Calibration: 1707017 Instrument: MS-V5
Matrix: Water Calibration Date: 07/18/17 00:46

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF										
1,1-Dichloroethane												
1,2-Dichloroethane												
1,1-Dichloroethene												
cis-1,2-Dichloroethene												
trans-1,2-Dichloroethene												
Total 1,2-Dichloroethene												
1,2-Dichloropropane												
1,3-Dichloropropane												
2,2-Dichloropropane												
1,1-Dichloropropene												
cis-1,3-Dichloropropene												
trans-1,3-Dichloropropene												
Total 1,3-Dichloropropene												
Ethylbenzene												
Hexachlorobutadiene												
Isopropylbenzene												
p-Isopropyltoluene												
Methylene chloride												
Methyl t-butyl ether												
Naphthalene												
n-Propylbenzene												
Styrene												
1,1,1,2-Tetrachloroethane												
1,1,2,2-Tetrachloroethane												
Tetrachloroethene												



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
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INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Calibration: 1707017 Instrument: MS-V5
Matrix: Water Calibration Date: 07/18/17 00:46

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF										
Toluene												
1,2,3-Trichlorobenzene												
1,2,4-Trichlorobenzene												
1,1,1-Trichloroethane												
1,1,2-Trichloroethane												
Trichloroethylene												
Trichlorofluoromethane												
1,2,3-Trichloropropane												
1,1,2-Trichloro-1,2,2-trifluoroethan												
1,2,4-Trimethylbenzene												
1,3,5-Trimethylbenzene												
Vinyl chloride												
Total Xylenes												
Total Trihalomethanes												
Acetone												
Acetonitrile												
Acrolein												
Acrylonitrile												
Allyl chloride												
t-Amyl Alcohol												
t-Amyl Methyl ether												
Benzyl chloride												
t-Butyl alcohol												
Carbon disulfide												
2-Chloroethyl vinyl ether												



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
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INITIAL CALIBRATION DATA (Continued)**EPA-8260B**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Calibration: 1707017 Instrument: MS-V5
Matrix: Water Calibration Date: 07/18/17 00:46

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF										
Chloroprene												
Chlorotrifluoroethene												
Cyclohexane												
Cyclohexanone												
trans-1,4-Dichloro-2-butene												
1,2-Dichlorotrifluoroethane												
2,2-Dichloro-1,1,1-trifluoroethane												
Diethyl ether												
Diisopropyl ether												
1,4-Dioxane												
Ethanol												
Ethyl Amyl Ketone												
Ethyl methacrylate												
Ethyl t-butyl ether												
Hexachloroethane												
Hexane												
2-Hexanone												
Isobutanol												
Isopropyl alcohol												
Methacrylonitrile												
Methyl acetate												
Methylecyclohexane												
Methyl ethyl ketone												
5-Methyl-3-heptanone												
Methyl iodide												



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INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>07/18/17 00:46</u>

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Methyl isobutyl ketone												
Methyl methacrylate												
Pentachloroethane												
Propionitrile												
Tetrahydrofuran												
Vinyl acetate												
p- & m-Xylenes												
o-Xylene												
Total Purgeable Petroleum Hydrocarbons	50	3.26912	500	3.855426	1000	3.833188	1500	3.697965	2000	3.767286	2500	3.469848
1,2-Dichloroethane-d4 (Surrogate)												
Toluene-d8 (Surrogate)												
4-Bromofluorobenzene (Surrogate)												
Benzene												
Bromobenzene												
Bromochloromethane												
Bromodichloromethane												
Bromoform												
Bromomethane												
n-Butylbenzene												
sec-Butylbenzene												
tert-Butylbenzene												
Carbon tetrachloride												
Chlorobenzene												
Chloroethane												
Chloroform												



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Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Calibration: 1707017 Instrument: MS-V5
Matrix: Water Calibration Date: 07/18/17 00:46

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF										
Chloromethane												
2-Chlorotoluene												
4-Chlorotoluene												
Dibromochloromethane												
1,2-Dibromo-3-chloropropane												
1,2-Dibromoethane												
Dibromomethane												
1,2-Dichlorobenzene												
1,3-Dichlorobenzene												
1,4-Dichlorobenzene												
Dichlorodifluoromethane												
1,1-Dichloroethane												
1,2-Dichloroethane												
1,1-Dichloroethene												
cis-1,2-Dichloroethene												
trans-1,2-Dichloroethene												
Total 1,2-Dichloroethene												
1,2-Dichloropropane												
1,3-Dichloropropane												
2,2-Dichloropropane												
1,1-Dichloropropene												
cis-1,3-Dichloropropene												
trans-1,3-Dichloropropene												
Total 1,3-Dichloropropene												
Ethylbenzene												



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San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA (Continued)**EPA-8260B**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Calibration: 1707017 Instrument: MS-V5
Matrix: Water Calibration Date: 07/18/17 00:46

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF										
Hexachlorobutadiene												
Isopropylbenzene												
p-Isopropyltoluene												
Methylene chloride												
Methyl t-butyl ether												
Naphthalene												
n-Propylbenzene												
Styrene												
1,1,1,2-Tetrachloroethane												
1,1,2,2-Tetrachloroethane												
Tetrachloroethene												
Toluene												
1,2,3-Trichlorobenzene												
1,2,4-Trichlorobenzene												
1,1,1-Trichloroethane												
1,1,2-Trichloroethane												
Trichloroethene												
Trichlorofluoromethane												
1,2,3-Trichloropropane												
1,1,2-Trichloro-1,2,2-trifluoroethan												
1,2,4-Trimethylbenzene												
1,3,5-Trimethylbenzene												
Vinyl chloride												
Total Xylenes												
Total Trihalomethanes												



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

INITIAL CALIBRATION DATA (Continued)**EPA-8260B**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Calibration: 1707017 Instrument: MS-V5
Matrix: Water Calibration Date: 07/18/17 00:46

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF										
Acetone												
Acetonitrile												
Acrolein												
Acrylonitrile												
Allyl chloride												
t-Amyl Alcohol												
t-Amyl Methyl ether												
Benzyl chloride												
t-Butyl alcohol												
Carbon disulfide												
2-Chloroethyl vinyl ether												
Chloroprene												
Chlorotrifluoroethene												
Cyclohexane												
Cyclohexanone												
trans-1,4-Dichloro-2-butene												
1,2-Dichlorotrifluoroethane												
2,2-Dichloro-1,1,1-trifluoroethane												
Diethyl ether												
Diisopropyl ether												
1,4-Dioxane												
Ethanol												
Ethyl Amyl Ketone												
Ethyl methacrylate												
Ethyl t-butyl ether												



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Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>07/18/17 00:46</u>

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Hexachloroethane												
Hexane												
2-Hexanone												
Isobutanol												
Isopropyl alcohol												
Methacrylonitrile												
Methyl acetate												
Methylcyclohexane												
Methyl ethyl ketone												
5-Methyl-3-heptanone												
Methyl iodide												
Methyl isobutyl ketone												
Methyl methacrylate												
Pentachloroethane												
Propionitrile												
Tetrahydrofuran												
Vinyl acetate												
p- & m-Xylenes												
o-Xylene												
Total Purgeable Petroleum Hydrocarbons	50	3.26912	500	3.855426	1000	3.833188	1500	3.697965	2000	3.767286	2500	3.469848
1,2-Dichloroethane-d4 (Surrogate)												
Toluene-d8 (Surrogate)												
4-Bromofluorobenzene (Surrogate)												



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Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>07/18/17 00:46</u>

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Benzene	2.047739	7.975319	6.936667	7.509294E-02			15	
Bromobenzene	1.167814	3.645673	10.44	2.779896E-03			15	
Bromochloromethane	0.1664346	4.747927	6.175	8.897551E-02			15	
Bromodichloromethane	0.2878825	4.896981	8.051667	0.0545546			15	
Bromoform	0.245463	14.7808	10.15333	4.894263E-02			SPCC (0.10)	
Bromomethane	0.406522	3.057725	2.436667	0.2126912			15	
n-Butylbenzene	4.798501	10.32777	11.19667	4.432301E-02			15	
sec-Butylbenzene	6.314385	13.16495	10.89	1.492901E-02			15	
tert-Butylbenzene	4.660614	6.172505	10.76167	3.643903E-02			15	
Carbon tetrachloride	0.449341	7.868999	6.71	1.409485E-02			15	
Chlorobenzene	3.316137	8.703972	9.636667	5.028739E-02			SPCC (0.30)	
Chloroethane	0.5145747	8.175335	2.566667	0.2020673			15	
Chloroform	0.7571101	5.641054	6.323333	8.020835E-02			CCC (20)	
Chloromethane	0.9407238	11.41846	1.948333	0.209787			SPCC (0.10)	
2-Chlorotoluene	4.677137	9.281955	10.54	8.602669E-03			15	
4-Chlorotoluene	4.223867	9.200021	10.61	1.653803E-02			15	
Dibromochloromethane	0.1504286	13.17659	9.235	5.969866E-02			15	
1,2-Dibromo-3-chloropropane	7.330085E-02	8.155469	11.664	4.802395E-02			15	
1,2-Dibromoethane	0.1293784	7.339435	9.32	1.632331E-02			15	
Dibromomethane	9.576412E-02	5.552506	7.905	6.711508E-02			15	
1,2-Dichlorobenzene	2.15653	3.913674	11.23833	3.489351E-02			15	
1,3-Dichlorobenzene	2.49992	6.777549	10.97833	3.290541E-02			15	
1,4-Dichlorobenzene	2.443238	3.991734	11.03	1.470375E-02			15	
Dichlorodifluoromethane	0.4975939	12.26991	1.76	8.063699E-03			15	
1,1-Dichloroethane	1.070106	5.014371	5.05	1.556668E-02			SPCC (0.10)	
1,2-Dichloroethane	0.4067953	6.904985	6.998333	5.804784E-02			15	



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Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>07/18/17 00:46</u>

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,1-Dichloroethene	0.8069668	5.313301	3.515	0.1557692			CCC (20)	
cis-1,2-Dichloroethene	0.5222008	5.332765	5.821667	7.057926E-02			15	
trans-1,2-Dichloroethene	0.5009588	4.773832	4.501667	0.0902417			15	
Total 1,2-Dichloroethene	0.5115798	4.674194	5.821667	7.057926E-02			15	
1,2-Dichloropropane	0.379403	2.403017	7.831667	0.0524673			CCC (20)	
1,3-Dichloropropane	0.2528371	3.287487	9.078333	4.054708E-02			15	
2,2-Dichloropropane	0.602219	4.985956	5.83	6.523725E-03			15	
1,1-Dichloropropene	0.6845791	5.607404	6.72	9.471379E-02			15	
cis-1,3-Dichloropropene	0.3594295	6.186595	8.398333	4.271731E-02			15	
trans-1,3-Dichloropropene	0.2346113	13.31409	8.82	1.724867E-02			15	
Total 1,3-Dichloropropene	0.2970204	8.91472	8.82	1.724867E-02			15	
Ethylbenzene	1.948304	6.711166	9.69	2.086988E-02			CCC (20)	
Hexachlorobutadiene	0.86466	6.731708	12.17167	3.249952E-02			15	
Isopropylbenzene	5.700983	12.01191	10.23	0.0167001			15	
p-Isopropyltoluene	5.149437	12.94217	10.97	1.272075E-02			15	
Methylene chloride	0.4314876	7.008245	4.15	2.617728E-02			15	
Methyl t-butyl ether	0.603852	3.358593	4.483333	0.1145828			15	
Naphthalene	1.569043	10.53489	12.26	1.714861E-02			15	
n-Propylbenzene	7.403456	7.766669	10.476	5.149431E-02			15	
Styrene	3.356924	7.155197	10.02	0.0198293			15	
1,1,1,2-Tetrachloroethane	0.8160317	7.468304	9.69	2.086988E-02			15	
1,1,2,2-Tetrachloroethane	0.5437402	4.378707	10.40833	0.0365974			SPCC (0.30)	
Tetrachloroethene	0.3290699	4.314963	9.03	1.545367E-02			15	
Toluene	0.8662846	6.097255	8.65	1.331998E-02			CCC (20)	
1,2,3-Trichlorobenzene	1.048181	3.389568	12.38	1.070383E-02			15	
1,2,4-Trichlorobenzene	1.248966	2.496908	12.11	2.449746E-02			15	



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Matrix:	<u>Water</u>	Calibration Date:	<u>07/18/17 00:46</u>

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,1,1-Trichloroethane	0.6553918	3.673248	6.526667	7.946589E-02			15	
1,1,2-Trichloroethane	0.1556498	6.06719	8.963333	5.878091E-02			15	
Trichloroethene	0.3434012	3.079274	7.601667	5.324327E-02			15	
Trichlorofluoromethane	0.6158835	5.608974	2.866667	0.1807154			15	
1,2,3-Trichloropropane	0.1156016	12.14427	10.45	1.965805E-02			15	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.4228091	8.712896	3.531667	0.1142314			15	
1,2,4-Trimethylbenzene	4.672745	10.02384	10.79167	4.231581E-02			15	
1,3,5-Trimethylbenzene	4.717828	10.09625	10.57167	3.709394E-02			15	
Vinyl chloride	0.7494116	5.322207	2.07	5.801038E-03			CCC (20)	
Total Xylenes	2.323025	9.403007	10.01	9.924553E-03			15	
Total Trihalomethanes	7387.704	10.38989	10.15333	4.894263E-02			15	
Acetone	4.120558E-02	7.355169	3.554	0.1542441			15	
Acetonitrile	1.962376E-02	6.640588	3.908	0.1133817			15	
Acrolein	1.822349E-02	7.107257	3.39	2.140274E-03			15	
Acrylonitrile	6.794017E-02	3.939644	4.435	0.1236041			15	
Allyl chloride	1.003175	4.726935	3.98	1.761732E-02			15	
t-Amyl Alcohol	9.589422E-03	8.589473	6.96	9.150358E-02			15	
t-Amyl Methyl ether	0.6727663	5.977467	7.081667	5.899898E-02			15	
Benzyl chloride	0.5754497	21.75697	11.09	1.526915E-02	0.99878		0.99	
t-Butyl alcohol	0.0118311	3.22277	4.273333	0.2423085			15	
Carbon disulfide	1.516116	5.400329	3.79	0.013191			15	
2-Chloroethyl vinyl ether	9.798764E-02	4.768539	8.275	6.513453E-02			15	
Chloroprene	1.054363	4.56629	5.141667	8.153481E-02			15	
Chlorotrifluoroethene							15	
Cyclohexane	1.308731	7.841383	6.611667	5.923215E-02			15	
Cyclohexanone	6.618331E-02	6.533008	10.29167	4.271745E-02			15	



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Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
trans-1,4-Dichloro-2-butene	0.1052838	14.34315	10.426	5.090708E-02			15	
1,2-Dichlorotrifluoroethane	0.6588754	4.230009	3.296667	0.1557001			15	
2,2-Dichloro-1,1,1-trifluoroethane	0.9482424	4.689324	3.386667	0.1519809			15	
Diethyl ether	0.2500657	8.290032	3.22	2.123135E-02			15	
Diisopropyl ether	0.3736986	7.025495	5.096667	0.1006095			15	
1,4-Dioxane	9.091868E-04	6.11724	7.891667	5.151265E-02			15	
Ethanol	1.803136E-03	5.606357	3.081667	0.5201438			15	
Ethyl Amyl Ketone	0.3958186	7.879599	10.75167	3.756474E-02			15	
Ethyl methacrylate	0.1707978	5.312147	8.848334	4.928121E-02			15	
Ethyl t-butyl ether	1.222825	6.328552	5.583333	9.166626E-02			15	
Hexachloroethane	0.7098202	27.21178	11.4	3.753579E-03	0.99925		0.99	
Hexane	0.6427995	11.57174	4.855	0.1138465			15	
2-Hexanone	7.579232E-02	10.17669	9.091667	4.757151E-02			15	
Isobutanol	5.666875E-03	11.0932	6.84	9.249917E-02			15	
Isopropyl alcohol	8.311588E-03	9.768502	3.746667	0.3235285			15	
Methacrylonitrile	0.0669583	9.006243	6.12	1.277828E-02			15	
Methyl acetate	0.1240965	4.884847	3.965	0.1388816			15	
Methylcyclohexane	0.6111907	7.704348	7.806667	6.510089E-02			15	
Methyl ethyl ketone	7.316144E-02	7.850683	5.796667	9.151477E-02			15	
5-Methyl-3-heptanone	0.4580468	8.020127	10.43167	3.686923E-02			15	
Methyl iodide	0.5894983	7.903214	3.7	1.260276E-02			15	
Methyl isobutyl ketone	0.1118834	8.407287	8.5	0			15	
Methyl methacrylate	7.466178E-02	6.064135	7.871667	5.057399E-02			15	
Pentachloroethane	0.4000271	7.814724	10.79333	5.134563E-02			15	
Propionitrile	2.456186E-02	5.336931	5.881667	0.0697539			15	
Tetrahydrofuran	4.910266E-02	7.462978	6.186667	8.404824E-02			15	



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Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Vinyl acetate	0.5836509	10.82416	5.053333	0.1030703			15	
p- & m-Xylenes	2.383338	11.21367	9.77	1.748639E-02			15	
o-Xylene	2.2024	6.662899	10.01	9.924553E-03			15	
Total Purgeable Petroleum Hydrocarbons	3.648805	6.360727	9.568334	4.958059			15	
1,2-Dichloroethane-d4 (Surrogate)	0.292073	3.616111	6.916667	7.506552E-02			15	
Toluene-d8 (Surrogate)	1.234863	0.8727884	8.6	4.975675E-03			15	
4-Bromofluorobenzene (Surrogate)	1.493178	2.042971	10.34333	4.926945E-02			15	
Benzene	2.047739	7.975319	6.936667	7.509294E-02			15	
Bromobenzene	1.167814	3.645673	10.44	2.779896E-03			15	
Bromochloromethane	0.1664346	4.747927	6.175	8.897551E-02			15	
Bromodichloromethane	0.2878825	4.896981	8.051667	0.0545546			15	
Bromoform	0.245463	14.7808	10.15333	4.894263E-02			SPCC (0.10)	
Bromomethane	0.406522	3.057725	2.436667	0.2126912			15	
n-Butylbenzene	4.798501	10.32777	11.19667	4.432301E-02			15	
sec-Butylbenzene	6.314385	13.16495	10.89	1.492901E-02			15	
tert-Butylbenzene	4.660614	6.172505	10.76167	3.643903E-02			15	
Carbon tetrachloride	0.449341	7.868999	6.71	1.409485E-02			15	
Chlorobenzene	3.316137	8.703972	9.636667	5.028739E-02			SPCC (0.30)	
Chloroethane	0.5145747	8.175335	2.566667	0.2020673			15	
Chloroform	0.7571101	5.641054	6.323333	8.020835E-02			CCC (20)	
Chloromethane	0.9407238	11.41846	1.948333	0.209787			SPCC (0.10)	
2-Chlorotoluene	4.677137	9.281955	10.54	8.602669E-03			15	
4-Chlorotoluene	4.223867	9.200021	10.61	1.653803E-02			15	
Dibromochloromethane	0.1504286	13.17659	9.235	5.969866E-02			15	
1,2-Dibromo-3-chloropropane	7.330085E-02	8.155469	11.664	4.802395E-02			15	
1,2-Dibromoethane	0.1293784	7.339435	9.32	1.632331E-02			15	



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Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Dibromomethane	9.576412E-02	5.552506	7.905	6.711508E-02			15	
1,2-Dichlorobenzene	2.15653	3.913674	11.23833	3.489351E-02			15	
1,3-Dichlorobenzene	2.49992	6.777549	10.97833	3.290541E-02			15	
1,4-Dichlorobenzene	2.443238	3.991734	11.03	1.470375E-02			15	
Dichlorodifluoromethane	0.4975939	12.26991	1.76	8.063699E-03			15	
1,1-Dichloroethane	1.070106	5.014371	5.05	1.556668E-02			SPCC (0.10)	
1,2-Dichloroethane	0.4067953	6.904985	6.998333	5.804784E-02			15	
1,1-Dichloroethene	0.8069668	5.313301	3.515	0.1557692			CCC (20)	
cis-1,2-Dichloroethene	0.5222008	5.332765	5.821667	7.057926E-02			15	
trans-1,2-Dichloroethene	0.5009588	4.773832	4.501667	0.0902417			15	
Total 1,2-Dichloroethene	0.5115798	4.674194	5.821667	7.057926E-02			15	
1,2-Dichloropropane	0.379403	2.403017	7.831667	0.0524673			CCC (20)	
1,3-Dichloropropane	0.2528371	3.287487	9.078333	4.054708E-02			15	
2,2-Dichloropropane	0.602219	4.985956	5.83	6.523725E-03			15	
1,1-Dichloropropene	0.6845791	5.607404	6.72	9.471379E-02			15	
cis-1,3-Dichloropropene	0.3594295	6.186595	8.398333	4.271731E-02			15	
trans-1,3-Dichloropropene	0.2346113	13.31409	8.82	1.724867E-02			15	
Total 1,3-Dichloropropene	0.2970204	8.91472	8.82	1.724867E-02			15	
Ethylbenzene	1.948304	6.711166	9.69	2.086988E-02			CCC (20)	
Hexachlorobutadiene	0.86466	6.731708	12.17167	3.249952E-02			15	
Isopropylbenzene	5.700983	12.01191	10.23	0.0167001			15	
p-Isopropyltoluene	5.149437	12.94217	10.97	1.272075E-02			15	
Methylene chloride	0.4314876	7.008245	4.15	2.617728E-02			15	
Methyl t-butyl ether	0.603852	3.358593	4.483333	0.1145828			15	
Naphthalene	1.569043	10.53489	12.26	1.714861E-02			15	
n-Propylbenzene	7.403456	7.766669	10.476	5.149431E-02			15	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>07/18/17 00:46</u>

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Styrene	3.356924	7.155197	10.02	0.0198293			15	
1,1,1,2-Tetrachloroethane	0.8160317	7.468304	9.69	2.086988E-02			15	
1,1,2,2-Tetrachloroethane	0.5437402	4.378707	10.40833	0.0365974			SPCC (0.30)	
Tetrachloroethene	0.3290699	4.314963	9.03	1.545367E-02			15	
Toluene	0.8662846	6.097255	8.65	1.331998E-02			CCC (20)	
1,2,3-Trichlorobenzene	1.048181	3.389568	12.38	1.070383E-02			15	
1,2,4-Trichlorobenzene	1.248966	2.496908	12.11	2.449746E-02			15	
1,1,1-Trichloroethane	0.6553918	3.673248	6.526667	7.946589E-02			15	
1,1,2-Trichloroethane	0.1556498	6.06719	8.963333	5.878091E-02			15	
Trichloroethene	0.3434012	3.079274	7.601667	5.324327E-02			15	
Trichlorofluoromethane	0.6158835	5.608974	2.866667	0.1807154			15	
1,2,3-Trichloropropane	0.1156016	12.14427	10.45	1.965805E-02			15	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.4228091	8.712896	3.531667	0.1142314			15	
1,2,4-Trimethylbenzene	4.672745	10.02384	10.79167	4.231581E-02			15	
1,3,5-Trimethylbenzene	4.717828	10.09625	10.57167	3.709394E-02			15	
Vinyl chloride	0.7494116	5.322207	2.07	5.801038E-03			CCC (20)	
Total Xylenes	2.323025	9.403007	10.01	9.924553E-03			15	
Total Trihalomethanes	7387.704	10.38989	10.15333	4.894263E-02			15	
Acetone	4.120558E-02	7.355169	3.554	0.1542441			15	
Acetonitrile	1.962376E-02	6.640588	3.908	0.1133817			15	
Acrolein	1.822349E-02	7.107257	3.39	2.140274E-03			15	
Acrylonitrile	6.794017E-02	3.939644	4.435	0.1236041			15	
Allyl chloride	1.003175	4.726935	3.98	1.761732E-02			15	
t-Amyl Alcohol	9.589422E-03	8.589473	6.96	9.150358E-02			15	
t-Amyl Methyl ether	0.6727663	5.977467	7.081667	5.899898E-02			15	
Benzyl chloride	0.5754497	21.75697	11.09	1.526915E-02	0.99878		0.99	



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San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Calibration:	<u>1707017</u>	Instrument:	<u>MS-V5</u>
Matrix:	<u>Water</u>	Calibration Date:	<u>07/18/17 00:46</u>

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
t-Butyl alcohol	0.0118311	3.22277	4.273333	0.2423085			15	
Carbon disulfide	1.516116	5.400329	3.79	0.013191			15	
2-Chloroethyl vinyl ether	9.798764E-02	4.768539	8.275	6.513453E-02			15	
Chloroprene	1.054363	4.56629	5.141667	8.153481E-02			15	
Chlorotrifluoroethene							15	
Cyclohexane	1.308731	7.841383	6.611667	5.923215E-02			15	
Cyclohexanone	6.618331E-02	6.533008	10.29167	4.271745E-02			15	
trans-1,4-Dichloro-2-butene	0.1052838	14.34315	10.426	5.090708E-02			15	
1,2-Dichlorotrifluoroethane	0.6588754	4.230009	3.296667	0.1557001			15	
2,2-Dichloro-1,1,1-trifluoroethane	0.9482424	4.689324	3.386667	0.1519809			15	
Diethyl ether	0.2500657	8.290032	3.22	2.123135E-02			15	
Diisopropyl ether	0.3736986	7.025495	5.096667	0.1006095			15	
1,4-Dioxane	9.091868E-04	6.11724	7.891667	5.151265E-02			15	
Ethanol	1.803136E-03	5.606357	3.081667	0.5201438			15	
Ethyl Amyl Ketone	0.3958186	7.879599	10.75167	3.756474E-02			15	
Ethyl methacrylate	0.1707978	5.312147	8.848334	4.928121E-02			15	
Ethyl t-butyl ether	1.222825	6.328552	5.583333	9.166626E-02			15	
Hexachloroethane	0.7098202	27.21178	11.4	3.753579E-03	0.99925		0.99	
Hexane	0.6427995	11.57174	4.855	0.1138465			15	
2-Hexanone	7.579232E-02	10.17669	9.091667	4.757151E-02			15	
Isobutanol	5.666875E-03	11.0932	6.84	9.249917E-02			15	
Isopropyl alcohol	8.311588E-03	9.768502	3.746667	0.3235285			15	
Methacrylonitrile	0.0669583	9.006243	6.12	1.277828E-02			15	
Methyl acetate	0.1240965	4.884847	3.965	0.1388816			15	
Methylcyclohexane	0.6111907	7.704348	7.806667	6.510089E-02			15	
Methyl ethyl ketone	7.316144E-02	7.850683	5.796667	9.151477E-02			15	



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San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL CALIBRATION DATA (Continued)

EPA-8260B

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Calibration: 1707017 Instrument: MS-V5
Matrix: Water Calibration Date: 07/18/17 00:46

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
5-Methyl-3-heptanone	0.4580468	8.020127	10.43167	3.686923E-02			15	
Methyl iodide	0.5894983	7.903214	3.7	1.260276E-02			15	
Methyl isobutyl ketone	0.1118834	8.407287	8.5	0			15	
Methyl methacrylate	7.466178E-02	6.064135	7.871667	5.057399E-02			15	
Pentachloroethane	0.4000271	7.814724	10.79333	5.134563E-02			15	
Propionitrile	2.456186E-02	5.336931	5.881667	0.0697539			15	
Tetrahydrofuran	4.910266E-02	7.462978	6.186667	8.404824E-02			15	
Vinyl acetate	0.5836509	10.82416	5.053333	0.1030703			15	
p- & m-Xylenes	2.383338	11.21367	9.77	1.748639E-02			15	
o-Xylene	2.2024	6.662899	10.01	9.924553E-03			15	
Total Purgeable Petroleum Hydrocarbons	3.648805	6.360727	9.568334	4.958059			15	
1,2-Dichloroethane-d4 (Surrogate)	0.292073	3.616111	6.916667	7.506552E-02			15	
Toluene-d8 (Surrogate)	1.234863	0.8727884	8.6	4.975675E-03			15	
4-Bromofluorobenzene (Surrogate)	1.493178	2.042971	10.34333	4.926945E-02			15	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

HOLDING TIME SUMMARY

EPA-8260B

Laboratory: BC Laboratories SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
26PZ01_170724	07/24/17 11:16	07/24/17 21:40	07/28/17 07:00	5.00	14.00	07/29/17 02:40	5.00	14.00	
26PZ02_170724	07/24/17 10:23	07/24/17 21:40	07/28/17 07:00	5.00	14.00	07/29/17 03:03	5.00	14.00	
26PZ03_170724	07/24/17 12:05	07/24/17 21:40	07/28/17 07:00	5.00	14.00	07/29/17 03:26	5.00	14.00	
27EW-01_170724	07/24/17 13:45	07/24/17 21:40	07/28/17 07:00	5.00	14.00	07/29/17 03:49	5.00	14.00	
27EW-05_170724	07/24/17 11:45	07/24/17 21:40	07/28/17 07:00	5.00	14.00	07/29/17 04:12	5.00	14.00	
27EW-19_170724	07/24/17 09:09	07/24/17 21:40	07/28/17 07:00	5.00	14.00	07/29/17 04:35	5.00	14.00	
27EW-20_170724	07/24/17 14:00	07/24/17 21:40	07/28/17 07:00	5.00	14.00	07/29/17 04:58	5.00	14.00	
27MW06_170724	07/24/17 09:00	07/24/17 21:40	07/28/17 07:00	5.00	14.00	07/29/17 05:21	5.00	14.00	
27MW07_170724	07/24/17 10:30	07/24/17 21:40	07/28/17 07:00	5.00	14.00	07/29/17 05:44	5.00	14.00	
27MW08_170724	07/24/17 08:20	07/24/17 21:40	07/28/17 07:00	5.00	14.00	07/29/17 08:48	5.00	14.00	
27MW09_170724	07/24/17 12:55	07/24/17 21:40	07/28/17 07:00	5.00	14.00	07/29/17 06:07	5.00	14.00	
S13-TT-MW02_170724	07/24/17 09:55	07/24/17 21:40	07/28/17 07:00	5.00	14.00	07/29/17 09:11	5.00	14.00	
EB22_170724	07/24/17 14:05	07/24/17 21:40	07/28/17 07:00	5.00	14.00	07/29/17 09:34	5.00	14.00	
EB23_170724	07/24/17 14:00	07/24/17 21:40	07/28/17 07:00	5.00	14.00	07/29/17 09:57	5.00	14.00	
TB14_170724	07/24/17 14:00	07/24/17 21:40	07/28/17 07:00	5.00	14.00	07/29/17 10:19	5.00	14.00	

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data From Instrument MS-V5



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Samples

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL51.D Vial: 51
 Acq On : 29 Jul 2017 2:40 am Operator: MGC
 Sample : 1720267-01 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multipllr: 1.00

MS Integration Params: rteint.p
 Quant Time: Jul 29 9:18 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	159665	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	237447	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	65236	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	54893m	11.77	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	117.70%
31) Toluene d8 SMC#2	8.60	98	284980	9.72	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.20%
49) Bromofluorobenzene SMC#3	10.34	95	102313	10.50	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	105.00%

Target Compounds

					Qvalue
4) Vinyl chloride	2.07	62	8803	0.74	ug/L # 75
12) T-1,2-dichloroethene	4.50	96	17365	2.17	ug/L 93
13) 1,1-Dichloroethane	5.05	63	2795	0.16	ug/L # 68
15) Cis-1,2-dichloroethene	5.81	96	12770	1.53	ug/L 89
23) Benzene	6.94	78	6422	0.20	ug/L # 1
25) Trichloroethene	7.60	130	694	0.09	ug/L # 46
32) Toluene	8.65	92	4522	0.22	ug/L # 96
42) Ethylbenzene	9.69	106	2538	0.20	ug/L 73
43) P+m-Xylene	9.77	106	5389	0.35	ug/L 96
44) O-Xylene	10.01	106	4854	0.34	ug/L # 82
47) Isopropylbenzene	10.23	105	3281	0.09	ug/L 96
51) n-propylbenzene	10.48	91	6635	0.14	ug/L 90
53) 1,3,5-trimethylbenzene	10.57	105	4086	0.13	ug/L 94
57) 1,2,4-trimethylbenzene	10.79	105	20634	0.68	ug/L 88
58) sec-butylbenzene	10.89	105	5184	0.13	ug/L # 63
59) 4-isopropyltoluene	10.97	119	3476	0.10	ug/L 96
62) n-butylbenzene	11.19	91	5901	0.19	ug/L # 61
68) naphthalene	12.26	128	7574	0.74	ug/L 100

(#) = qualifier out of range (m) = manual integration

28JUL51.D 82605.M Sat Jul 29 09:26:06 2017

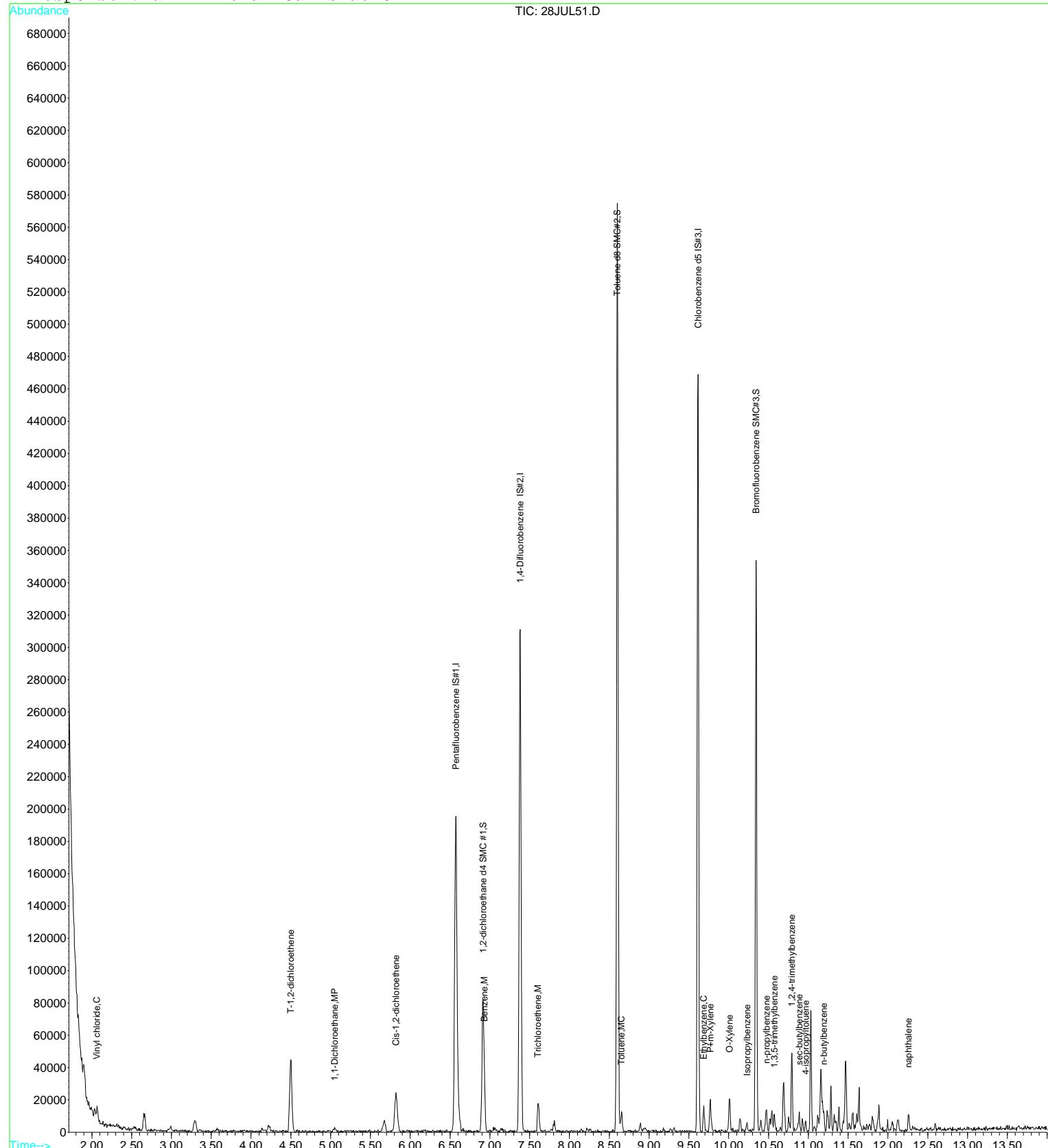
Page 1

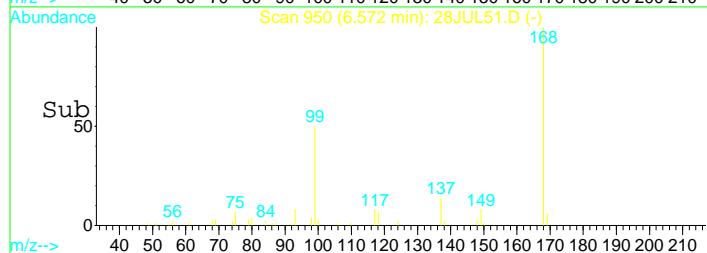
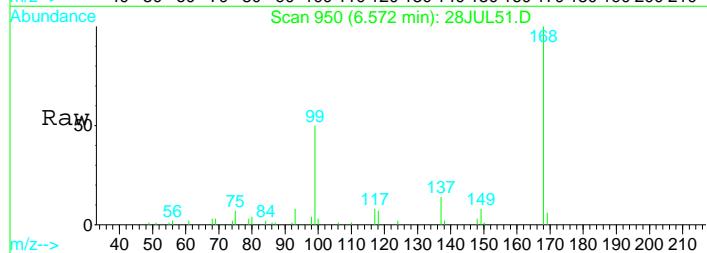
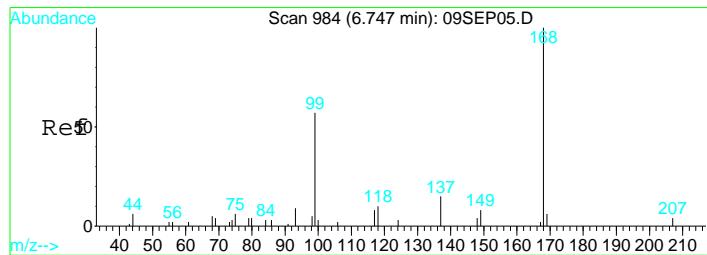
BC Laboratories, Inc, Page 301 of 925

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL51.D Vial: 51
 Acq On : 29 Jul 2017 2:40 am Operator: MGC
 Sample : 1720267-01 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:18 2017 Quant Results File: 82605.RES

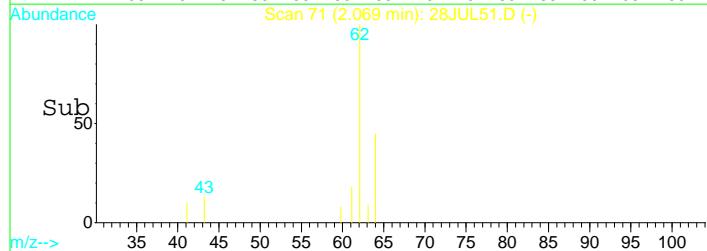
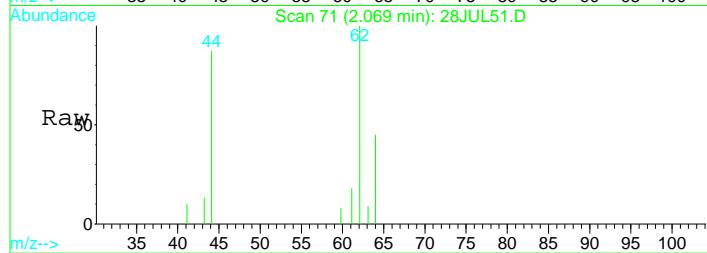
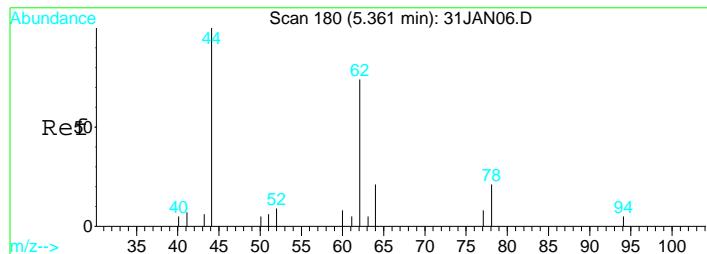
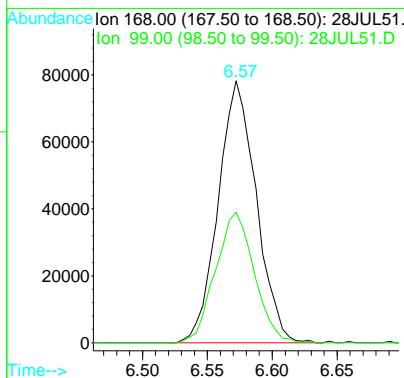
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration





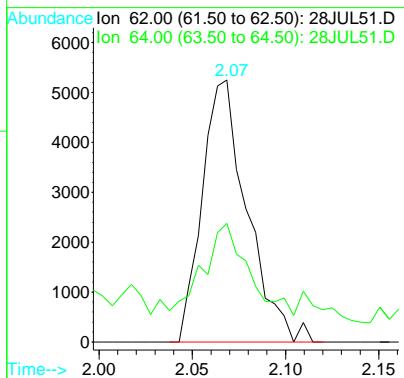
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 28JUL51.D
 Acq: 29 Jul 2017 2:40 am

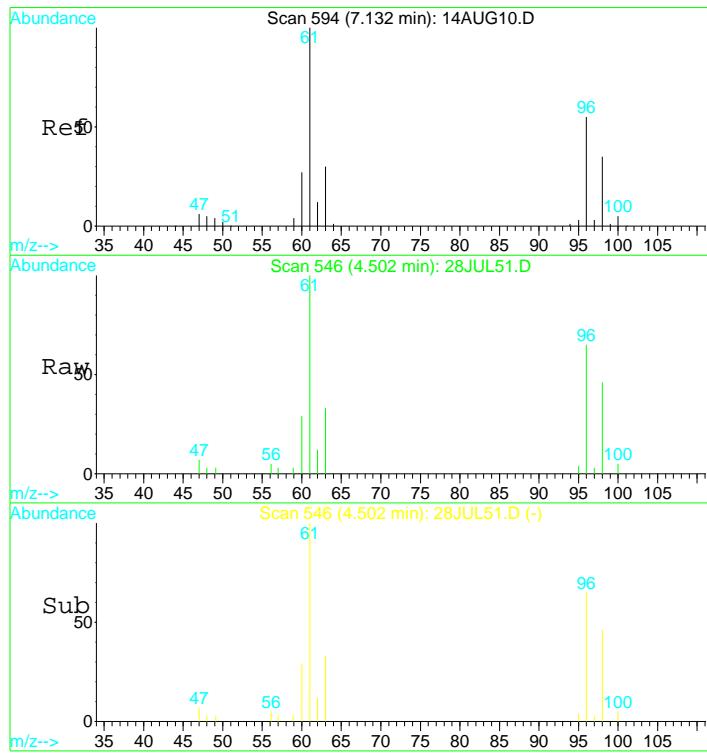
Tgt Ion: 168 Resp: 159665
 Ion Ratio Lower Upper
 168 100
 99 50.6 38.7 71.9



#4
 Vinyl chloride
 Concen: 0.74 ug/L
 RT: 2.07 min Scan# 71
 Delta R.T. -0.00 min
 Lab File: 28JUL51.D
 Acq: 29 Jul 2017 2:40 am

Tgt Ion: 62 Resp: 8803
 Ion Ratio Lower Upper
 62 100
 64 37.9 39.3 72.9#

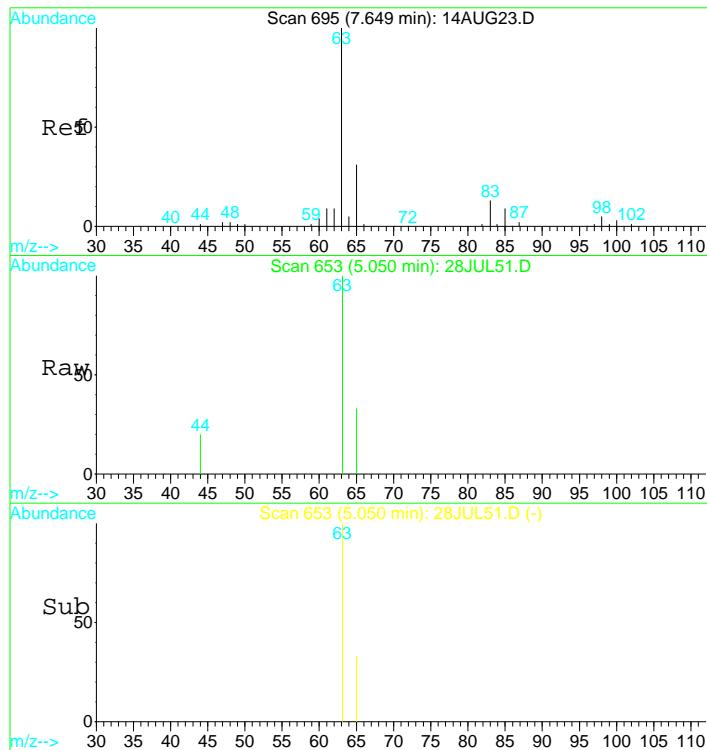
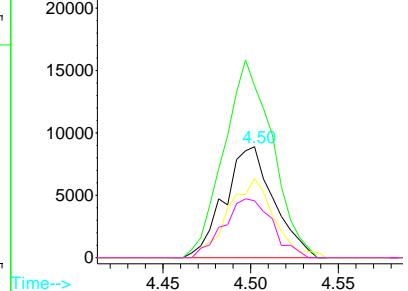




#12
 T-1,2-dichloroethene
 Concen: 2.17 ug/L
 RT: 4.50 min Scan# 546
 Delta R.T. 0.00 min
 Lab File: 28JUL51.D
 Acq: 29 Jul 2017 2:40 am

Tgt Ion: 96 Resp: 17365
 Ion Ratio Lower Upper
 96 100
 61 175.5 129.4 240.4
 98 66.4 41.5 77.1
 63 52.8 39.3 73.1

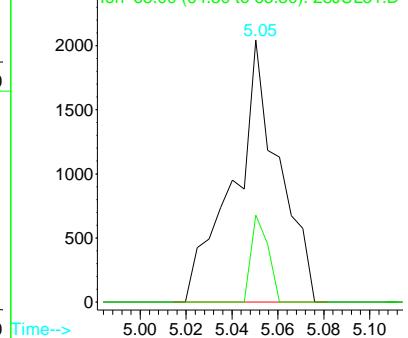
Abundance
 Ion 96.00 (95.50 to 96.50): 28JUL51.D
 Ion 61.00 (60.50 to 61.50): 28JUL51.D
 Ion 98.00 (97.50 to 98.50): 28JUL51.D
 Ion 63.00 (62.50 to 63.50): 28JUL51.D

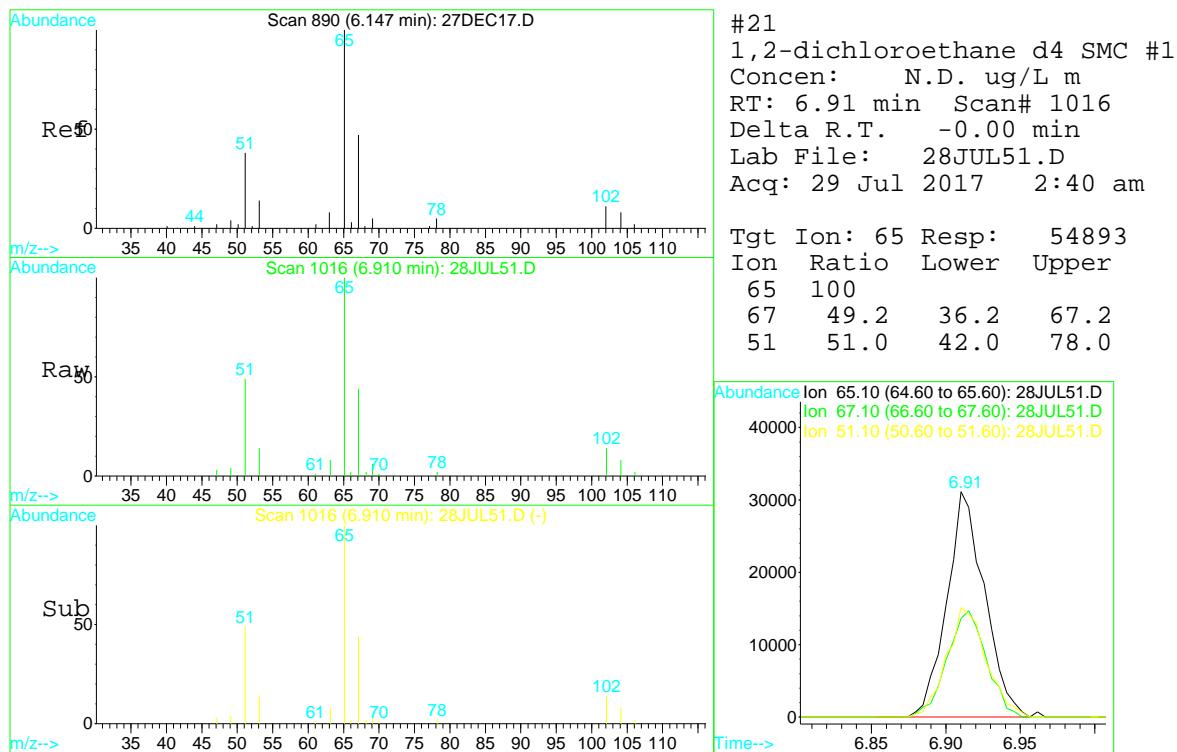
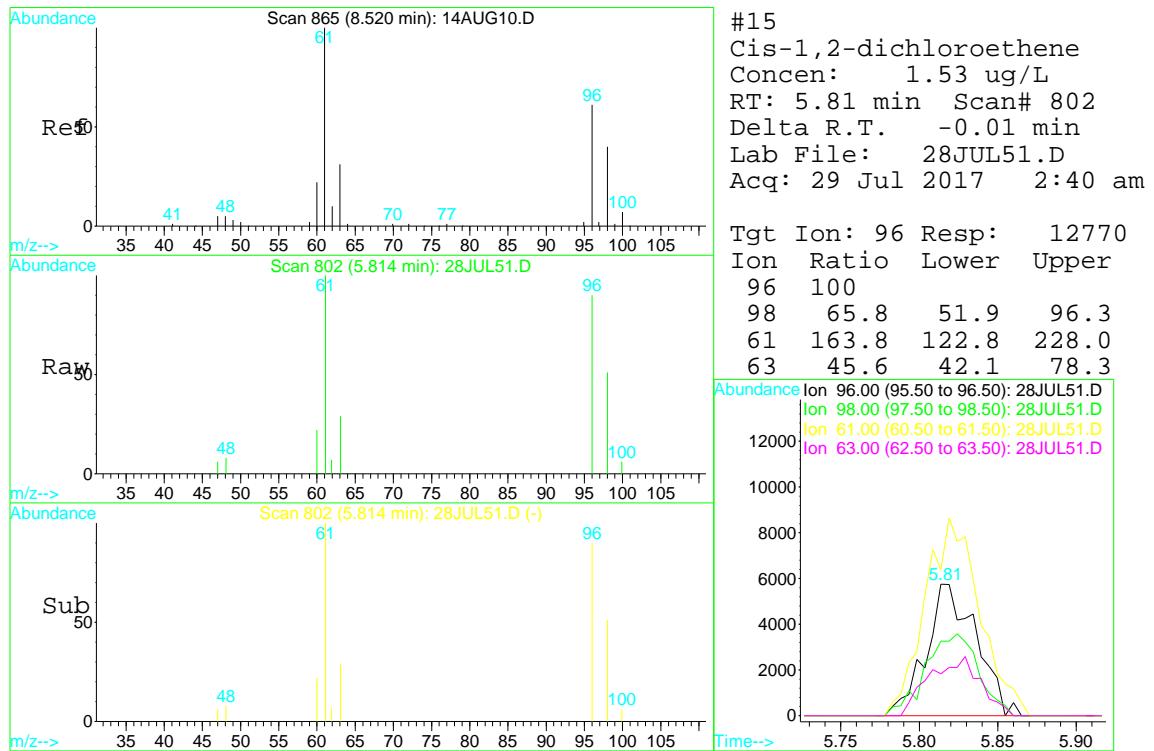


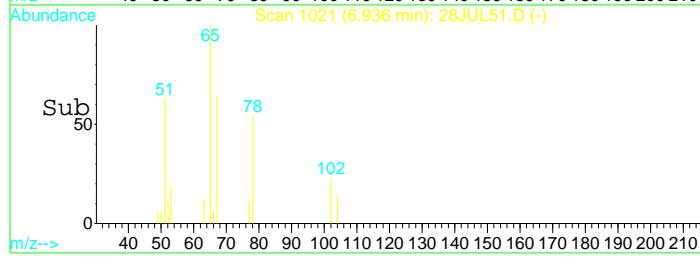
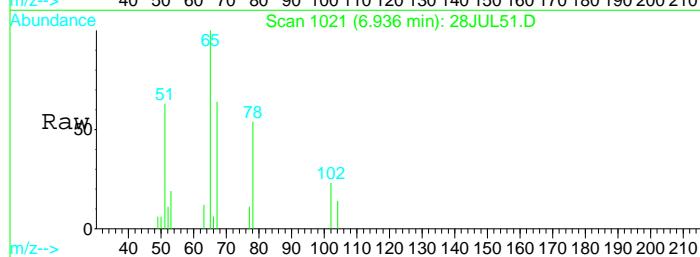
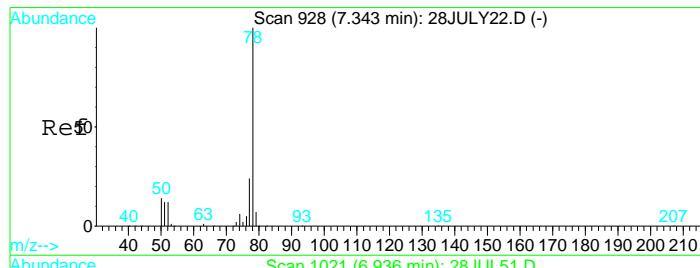
#13
 1,1-Dichloroethane
 Concen: 0.16 ug/L
 RT: 5.05 min Scan# 653
 Delta R.T. 0.00 min
 Lab File: 28JUL51.D
 Acq: 29 Jul 2017 2:40 am

Tgt Ion: 63 Resp: 2795
 Ion Ratio Lower Upper
 63 100
 65 12.5 20.8 38.6#

Abundance
 Ion 63.00 (62.50 to 63.50): 28JUL51.D
 Ion 65.00 (64.50 to 65.50): 28JUL51.D

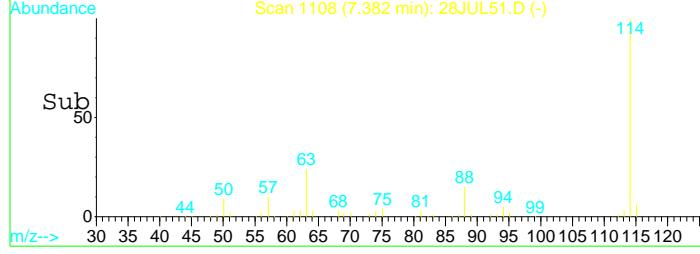
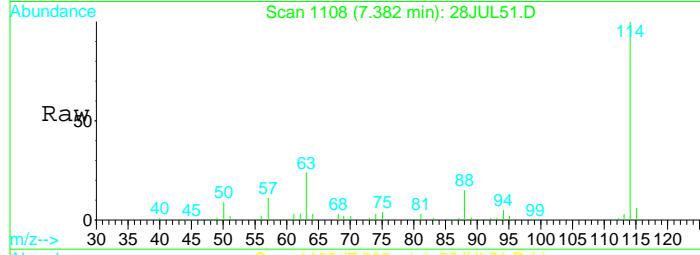
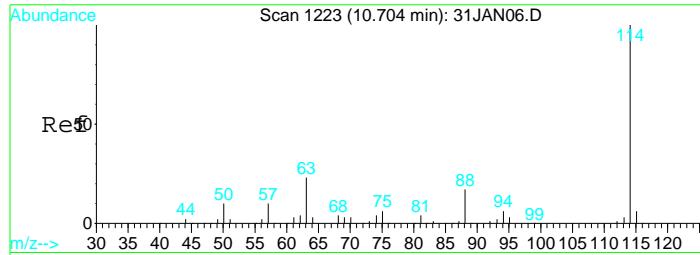
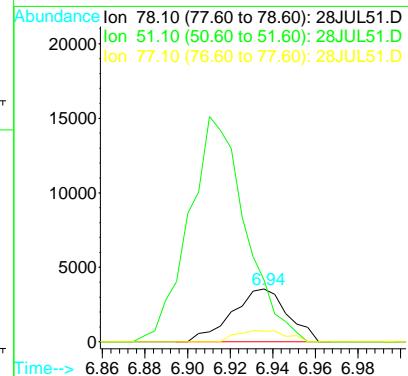






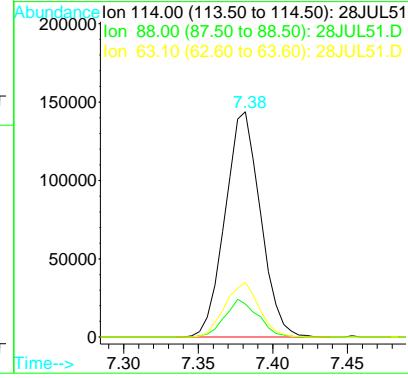
#23
 Benzene
 Concen: 0.20 ug/L
 RT: 6.94 min Scan# 1021
 Delta R.T. 0.00 min
 Lab File: 28JUL51.D
 Acq: 29 Jul 2017 2:40 am

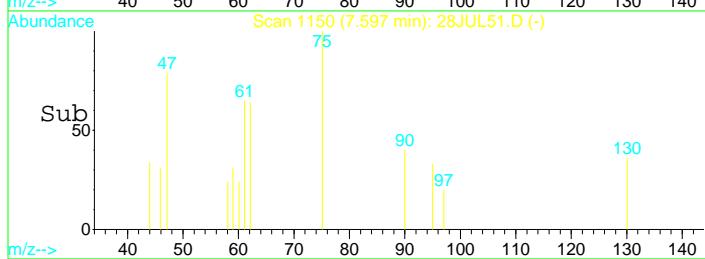
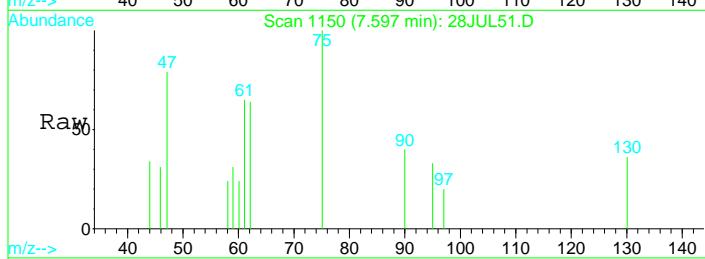
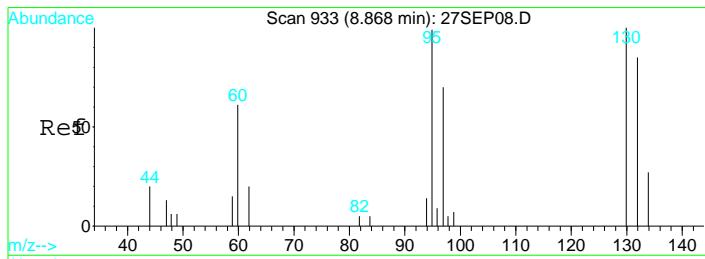
Tgt Ion: 78 Resp: 6422
 Ion Ratio Lower Upper
 78 100
 51 436.0 114.8 213.2#
 77 19.3 15.2 28.2



#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1108
 Delta R.T. 0.00 min
 Lab File: 28JUL51.D
 Acq: 29 Jul 2017 2:40 am

Tgt Ion: 114 Resp: 237447
 Ion Ratio Lower Upper
 114 100
 88 15.7 11.7 21.7
 63 23.4 16.7 30.9

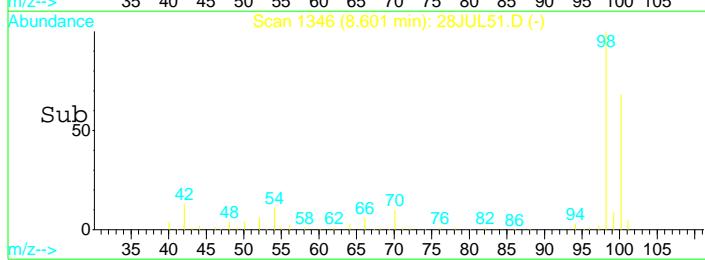
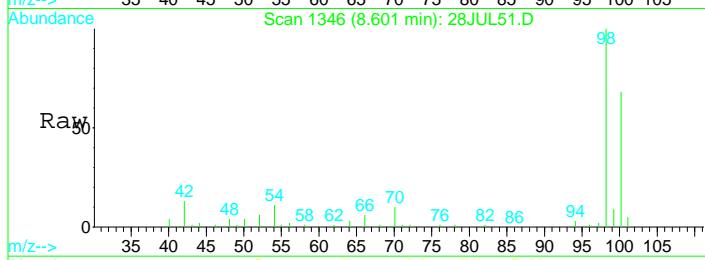
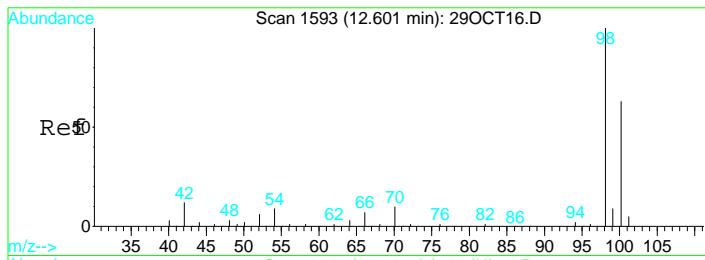
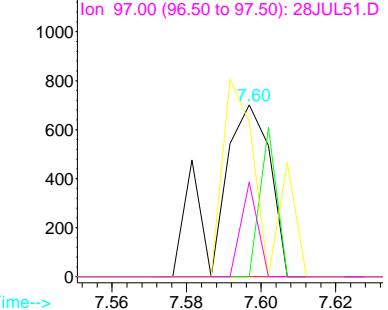




#25
Trichloroethene
Concen: 0.09 ug/L
RT: 7.60 min Scan# 1150
Delta R.T. 0.00 min
Lab File: 28JUL51.D
Acq: 29 Jul 2017 2:40 am

Tgt Ion: 130 Resp: 694
Ion Ratio Lower Upper
130 100
132 27.1 66.1 122.7#
95 84.3 86.1 159.9#
97 17.1 52.8 98.0#

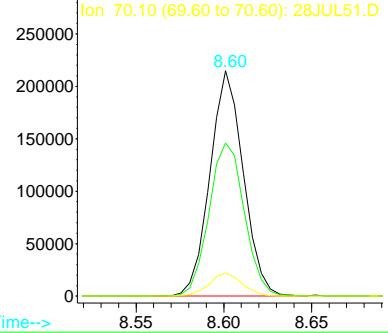
Abundance
Ion 129.90 (129.40 to 130.40): 28JUL51.
Ion 131.90 (131.40 to 132.40): 28JUL51.
Ion 95.00 (94.50 to 95.50): 28JUL51.D
Ion 97.00 (96.50 to 97.50): 28JUL51.D

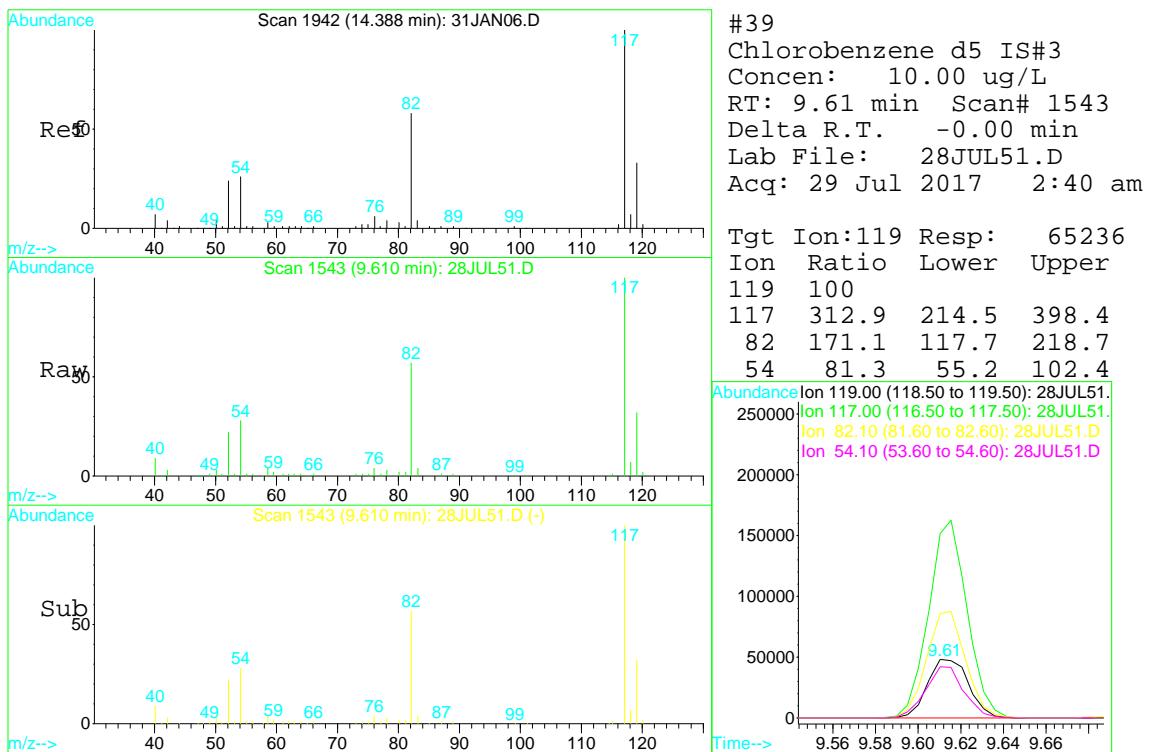
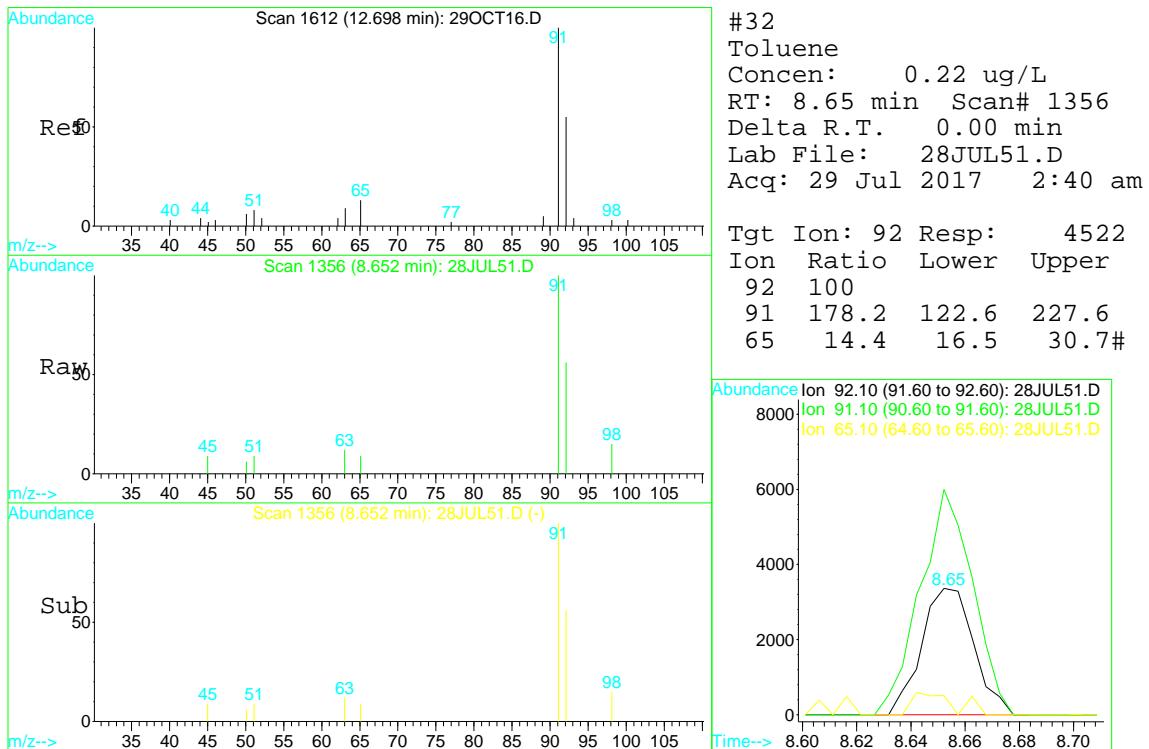


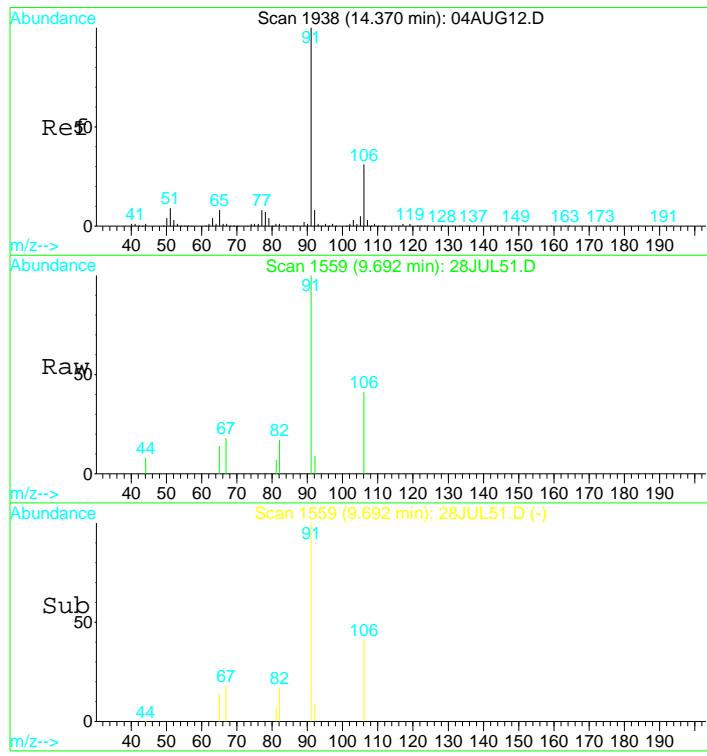
#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.60 min Scan# 1346
Delta R.T. 0.00 min
Lab File: 28JUL51.D
Acq: 29 Jul 2017 2:40 am

Tgt Ion: 98 Resp: 284980
Ion Ratio Lower Upper
98 100
100 72.0 49.7 92.3
70 10.2 7.3 13.7

Abundance
Ion 98.10 (97.60 to 98.60): 28JUL51.D
Ion 100.10 (99.60 to 100.60): 28JUL51.D
Ion 70.10 (69.60 to 70.60): 28JUL51.D

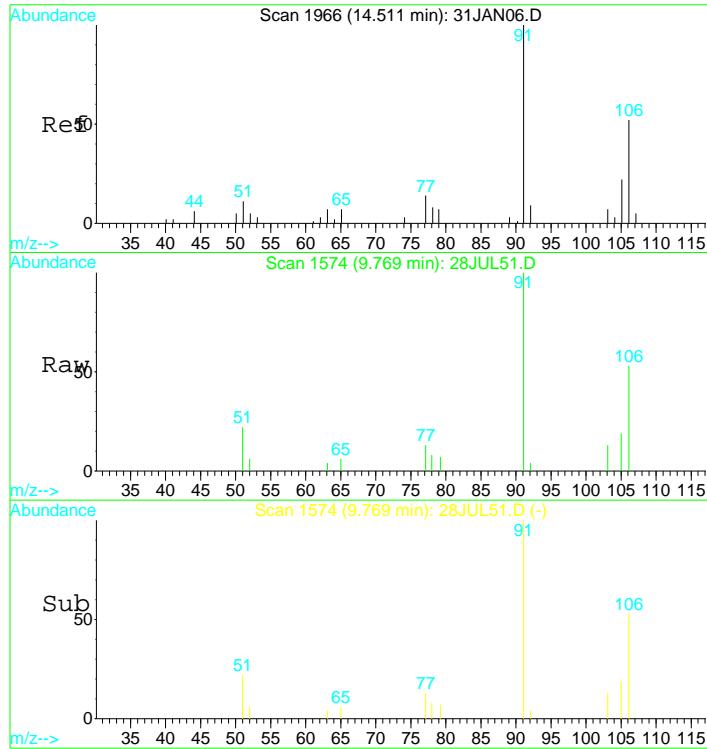
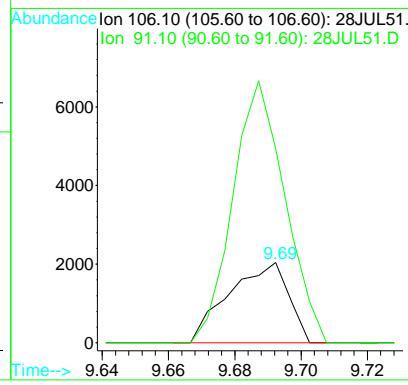






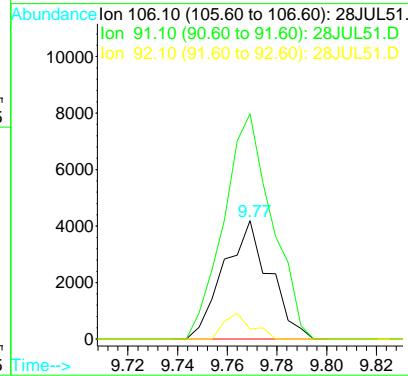
#42
Ethylbenzene
Concen: 0.20 ug/L
RT: 9.69 min Scan# 1559
Delta R.T. 0.01 min
Lab File: 28JUL51.D
Acq: 29 Jul 2017 2:40 am

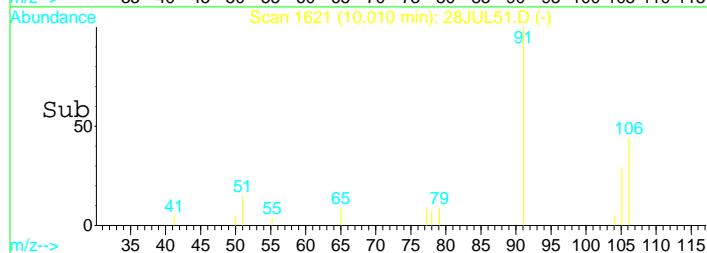
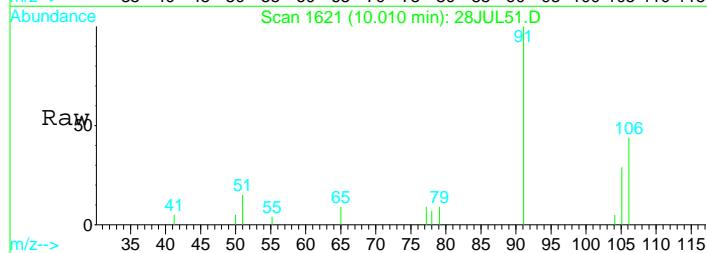
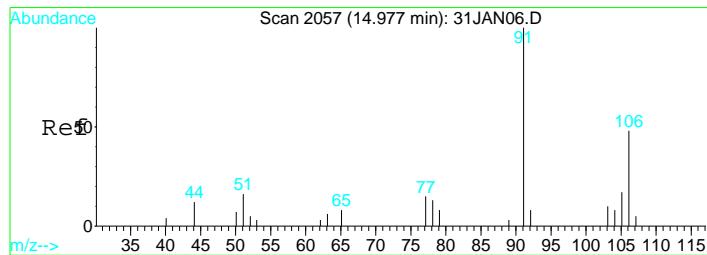
Tgt Ion:106 Resp: 2538
Ion Ratio Lower Upper
106 100
91 285.9 241.5 448.5



#43
P+m-Xylene
Concen: 0.35 ug/L
RT: 9.77 min Scan# 1574
Delta R.T. 0.00 min
Lab File: 28JUL51.D
Acq: 29 Jul 2017 2:40 am

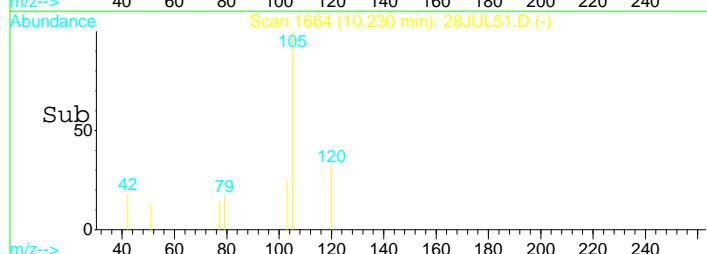
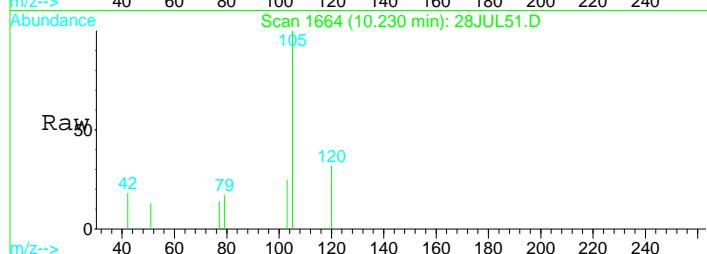
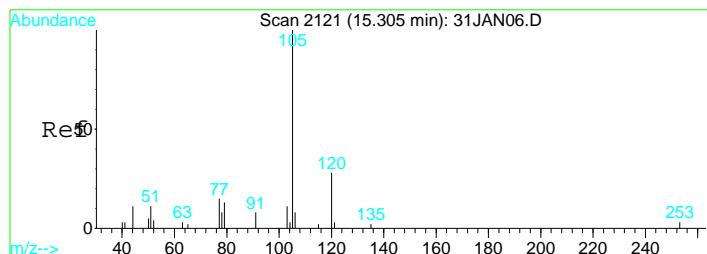
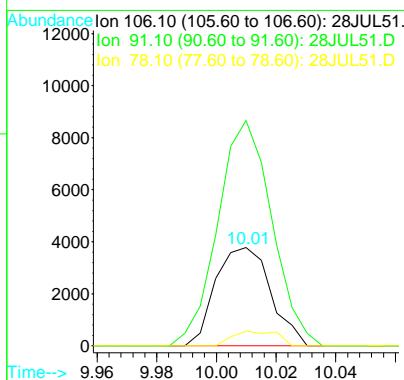
Tgt Ion:106 Resp: 5389
Ion Ratio Lower Upper
106 100
91 199.5 135.0 250.6
92 13.1 10.3 19.1





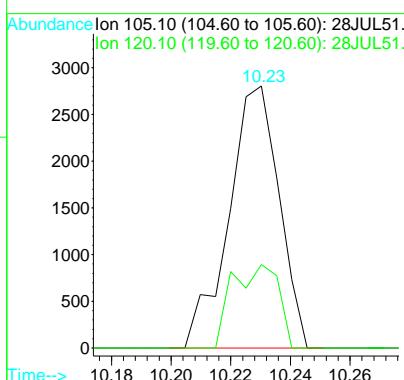
#44
O-Xylene
Concen: 0.34 ug/L
RT: 10.01 min Scan# 1621
Delta R.T. 0.00 min
Lab File: 28JUL51.D
Acq: 29 Jul 2017 2:40 am

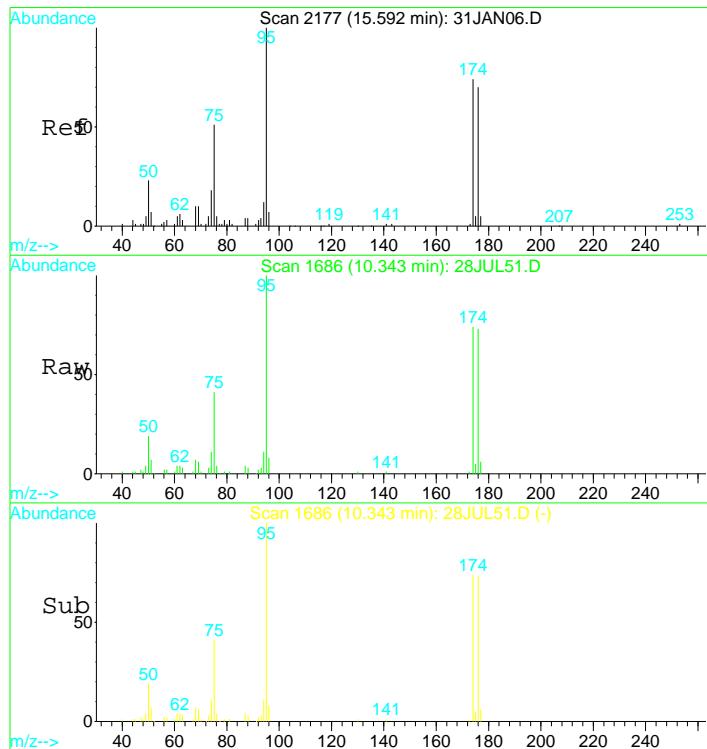
Tgt Ion: 106 Resp: 4854
Ion Ratio Lower Upper
106 100
91 224.5 154.3 286.5
78 12.2 47.1 87.5#



#47
Isopropylbenzene
Concen: 0.09 ug/L
RT: 10.23 min Scan# 1664
Delta R.T. 0.00 min
Lab File: 28JUL51.D
Acq: 29 Jul 2017 2:40 am

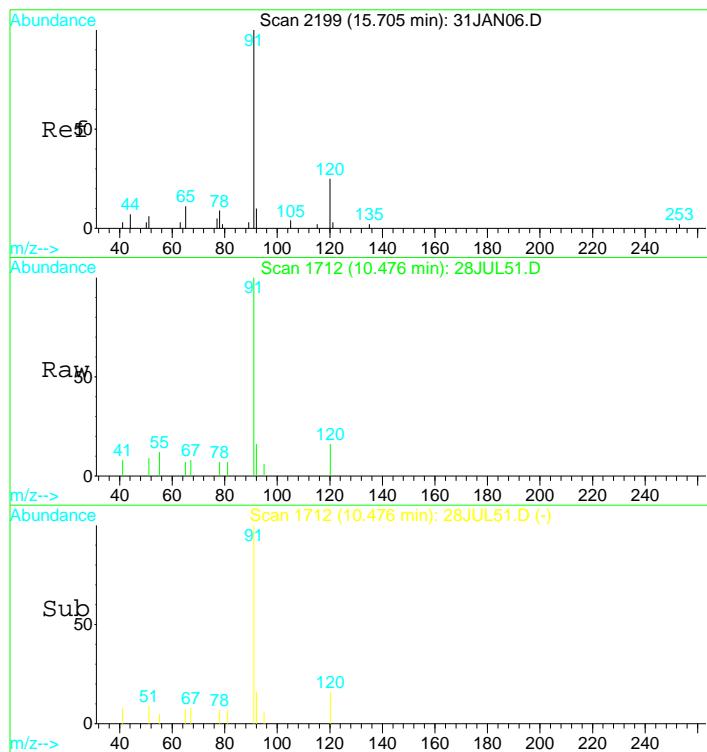
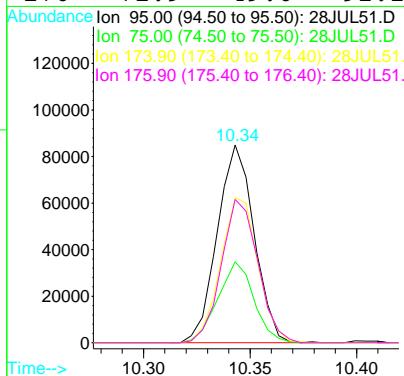
Tgt Ion: 105 Resp: 3281
Ion Ratio Lower Upper
105 100
120 29.3 19.2 35.6





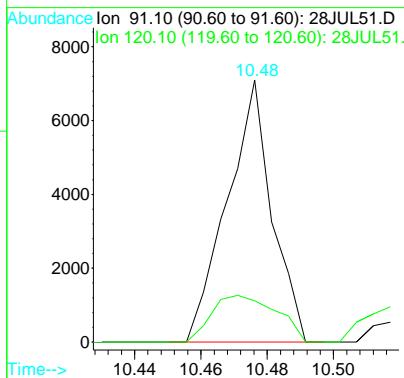
#49
 Bromofluorobenzene SMC#3
 Concen: Below ug/L
 RT: 10.34 min Scan# 1686
 Delta R.T. 0.00 min
 Lab File: 28JUL51.D
 Acq: 29 Jul 2017 2:40 am

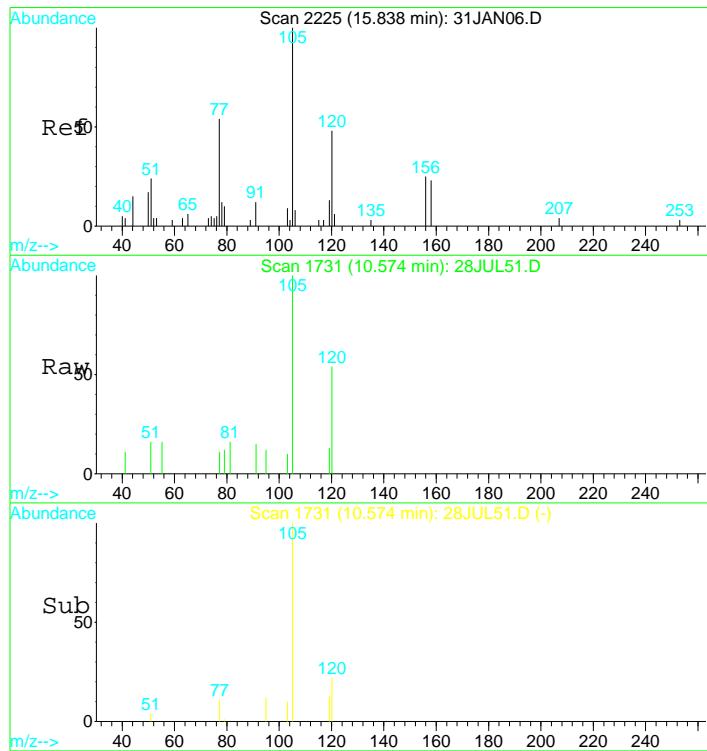
Tgt Ion: 95 Resp: 102313
 Ion Ratio Lower Upper
 95 100
 75 40.0 29.5 54.7
 174 74.2 52.3 97.1
 176 71.9 49.6 92.2



#51
 n-propylbenzene
 Concen: 0.14 ug/L
 RT: 10.48 min Scan# 1712
 Delta R.T. 0.00 min
 Lab File: 28JUL51.D
 Acq: 29 Jul 2017 2:40 am

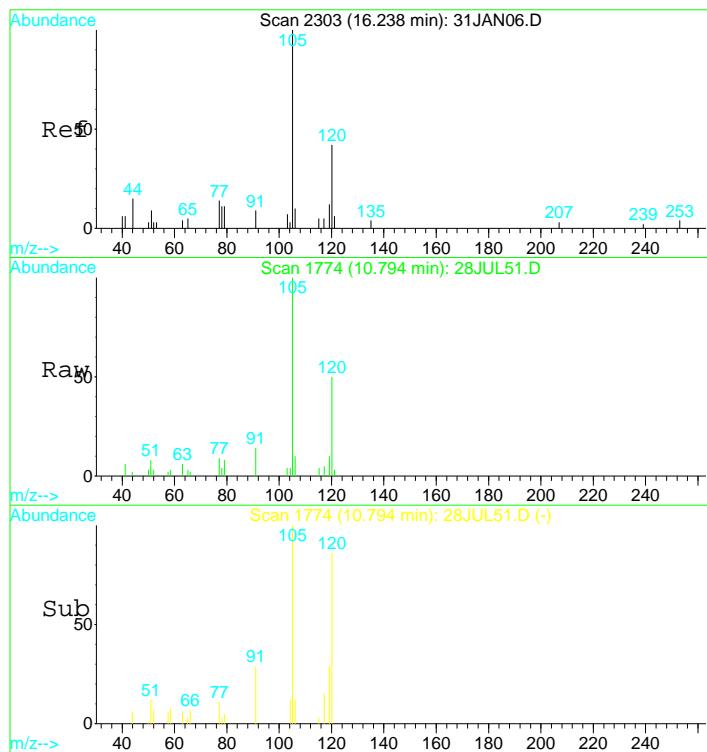
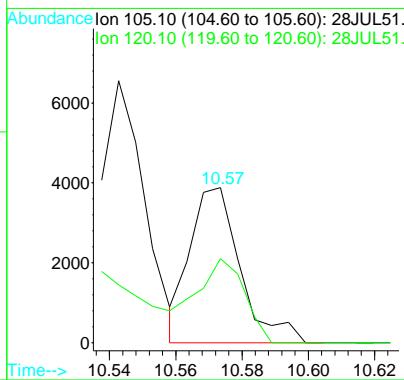
Tgt Ion: 91 Resp: 6635
 Ion Ratio Lower Upper
 91 100
 120 25.8 14.8 27.6





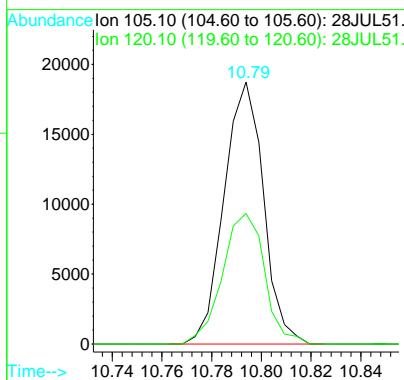
#53
1, 3, 5-trimethylbenzene
Concen: 0.13 ug/L
RT: 10.57 min Scan# 1731
Delta R.T. 0.00 min
Lab File: 28JUL51.D
Acq: 29 Jul 2017 2:40 am

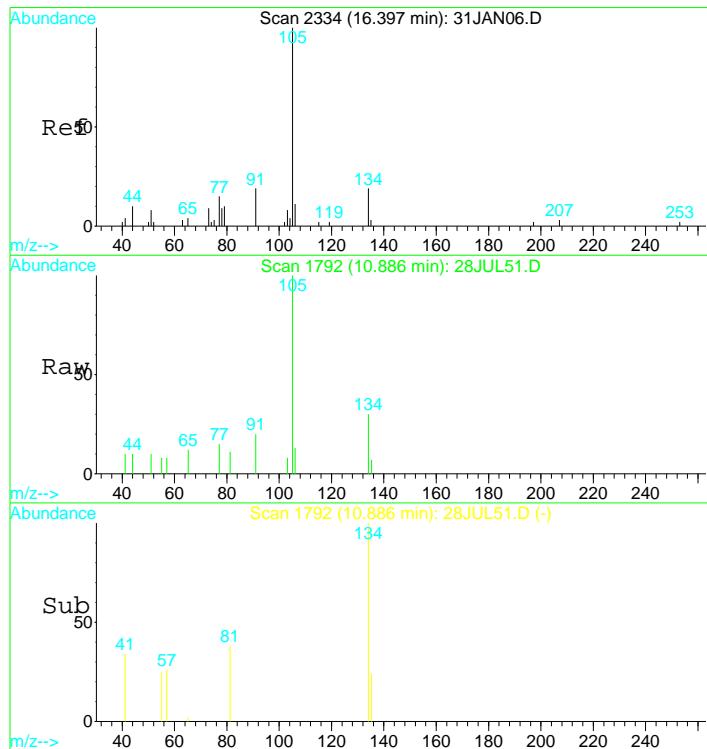
Tgt Ion:105 Resp: 4086
Ion Ratio Lower Upper
105 100
120 52.2 33.8 62.8



#57
1, 2, 4-trimethylbenzene
Concen: 0.68 ug/L
RT: 10.79 min Scan# 1774
Delta R.T. 0.00 min
Lab File: 28JUL51.D
Acq: 29 Jul 2017 2:40 am

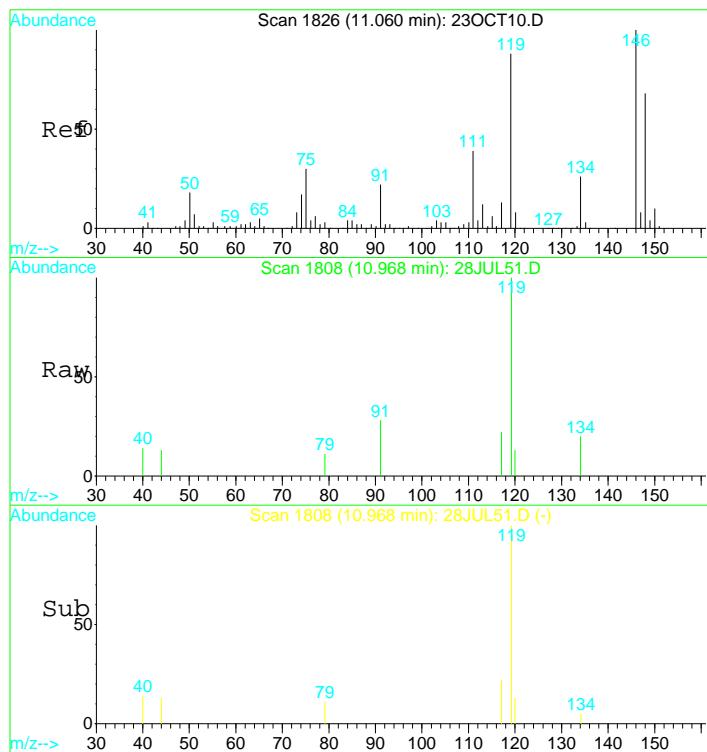
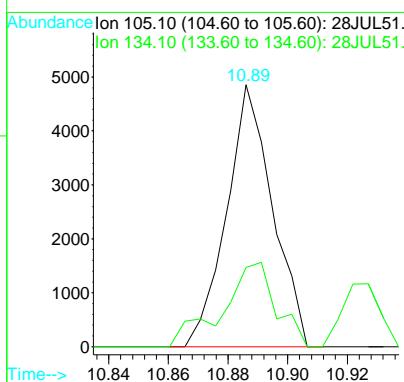
Tgt Ion:105 Resp: 20634
Ion Ratio Lower Upper
105 100
120 53.2 31.8 59.0





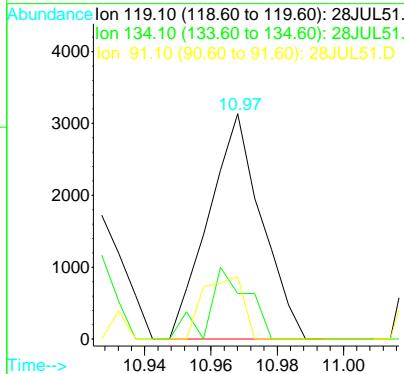
#58
sec-butylbenzene
Concen: 0.13 ug/L
RT: 10.89 min Scan# 1792
Delta R.T. 0.00 min
Lab File: 28JUL51.D
Acq: 29 Jul 2017 2:40 am

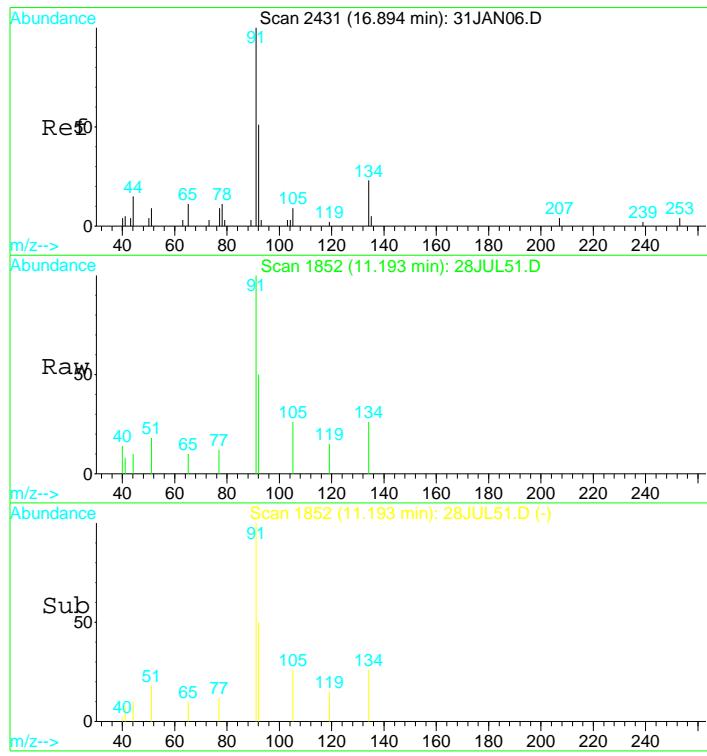
Tgt Ion:105 Resp: 5184
Ion Ratio Lower Upper
105 100
134 37.6 14.4 26.7#



#59
4-isopropyltoluene
Concen: 0.10 ug/L
RT: 10.97 min Scan# 1808
Delta R.T. 0.00 min
Lab File: 28JUL51.D
Acq: 29 Jul 2017 2:40 am

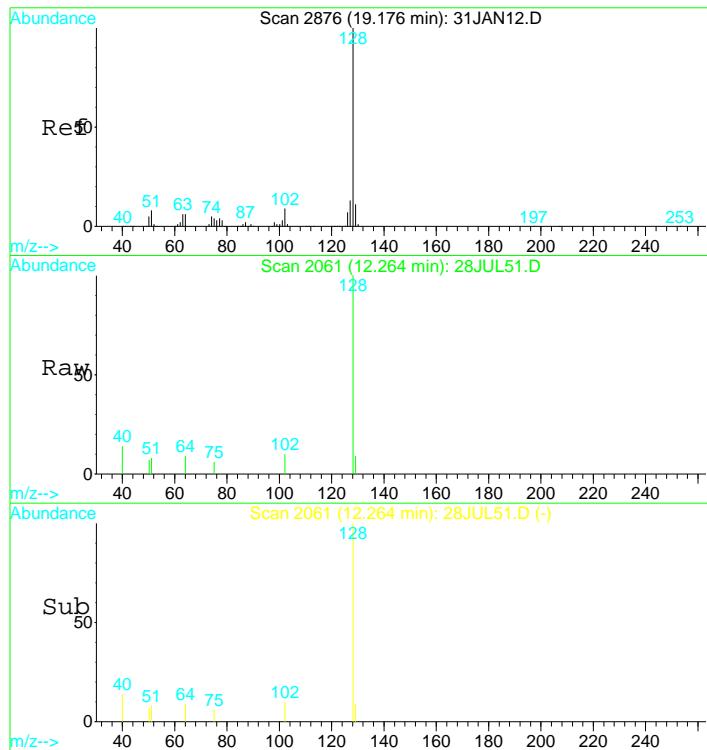
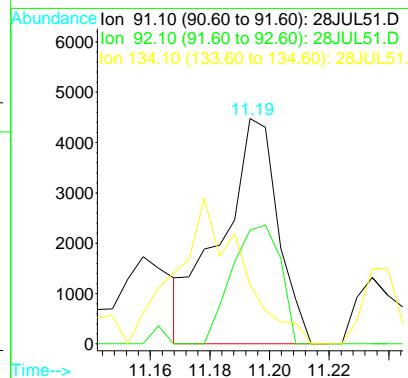
Tgt Ion:119 Resp: 3476
Ion Ratio Lower Upper
119 100
134 23.4 17.9 33.3
91 21.1 16.0 29.6





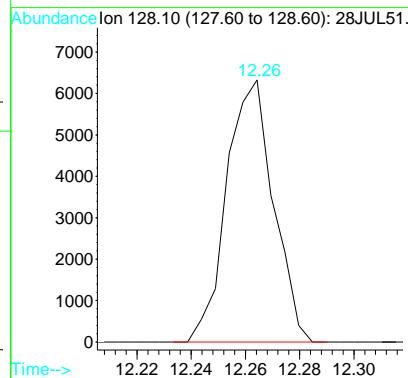
#62
n-butylbenzene
Concen: 0.19 ug/L
RT: 11.19 min Scan# 1852
Delta R.T. -0.00 min
Lab File: 28JUL51.D
Acq: 29 Jul 2017 2:40 am

Tgt Ion: 91 Resp: 5901
Ion Ratio Lower Upper
91 100
92 45.4 38.4 71.2
134 74.6 18.4 34.2#



#68
naphthalene
Concen: 0.74 ug/L
RT: 12.26 min Scan# 2061
Delta R.T. 0.00 min
Lab File: 28JUL51.D
Acq: 29 Jul 2017 2:40 am

Tgt Ion: 128 Resp: 7574



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL51.D Vial: 51
Acq On : 29 Jul 2017 2:40 am Operator: MGC
Sample : 1720267-01 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 29 9:27 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)

Title : EPA Method 624/8260

Last Update : Fri Jul 21 04:19:15 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	159665	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	237447	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	65236	10.00	ug/L	0.00

Target Compounds					Qvalue
4) 1,2-dichlorotrifluoroethan	3.28	67	5137	0.49	ug/L 94
27) Cyclohexane	6.61	56	7680	0.37	ug/L # 62
31) Methylcyclohexane	7.80	55	2805	0.19	ug/L # 90

(#= qualifier out of range (m)= manual integration

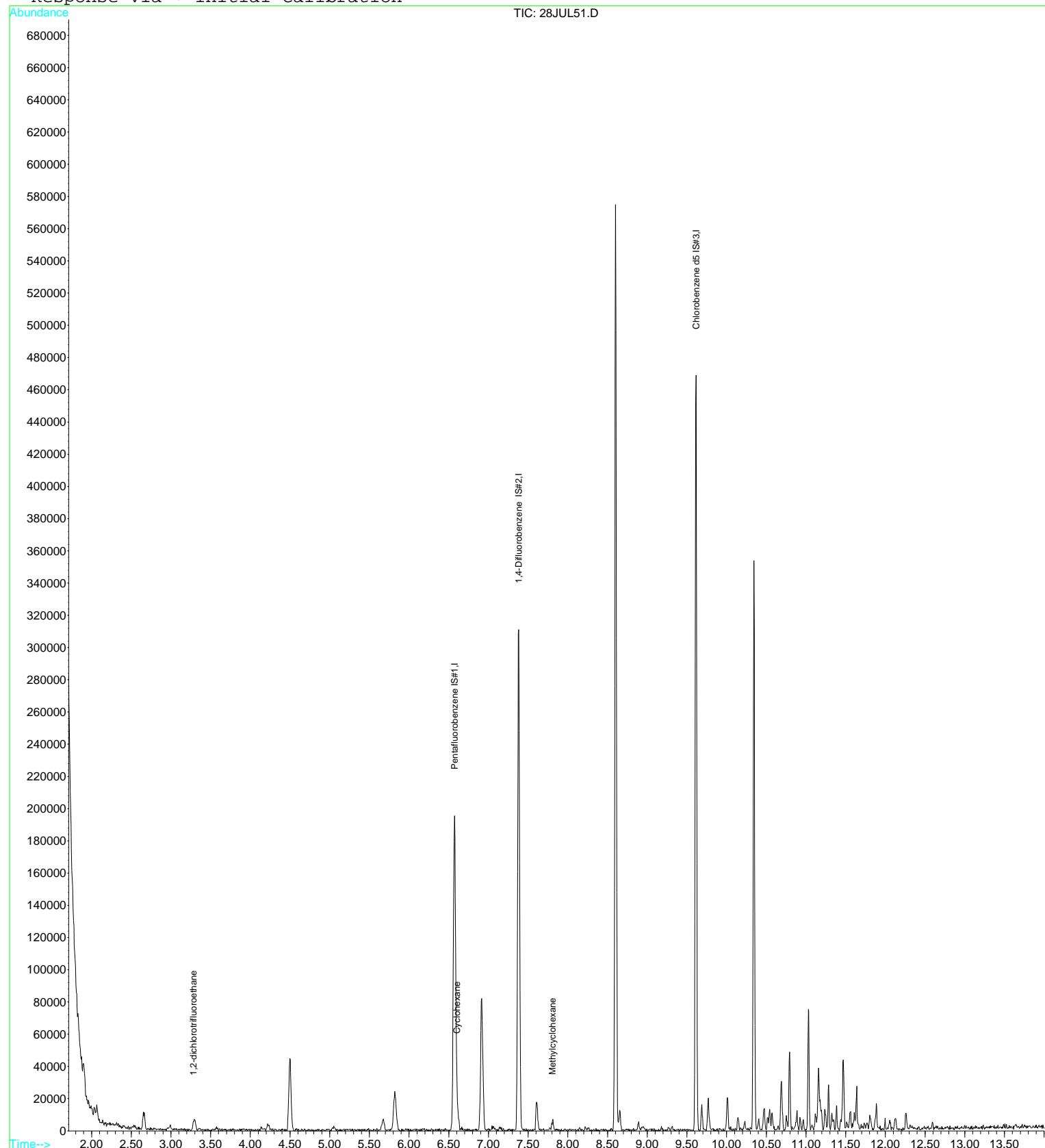
28JUL51.D 82605X.M Sat Jul 29 09:27:48 2017

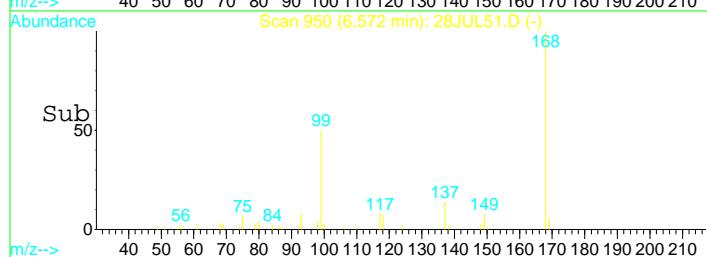
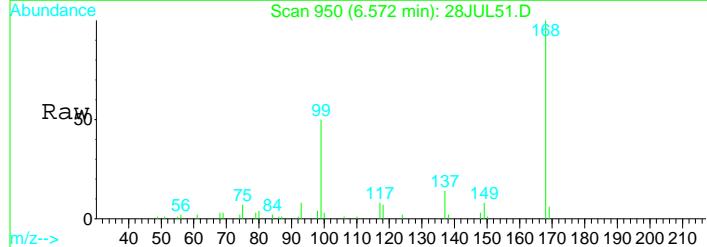
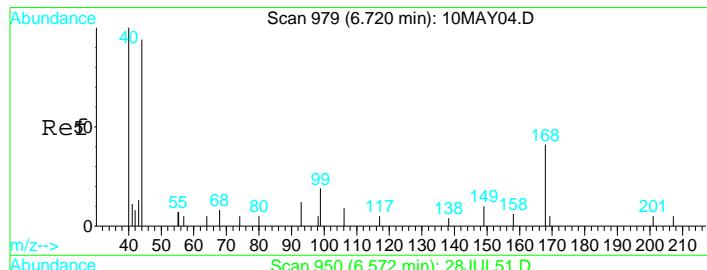
Page 1

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL51.D Vial: 51
 Acq On : 29 Jul 2017 2:40 am Operator: MGC
 Sample : 1720267-01 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:27 2017 Quant Results File: 82605X.RES

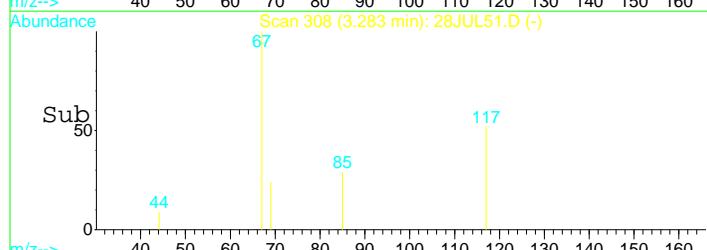
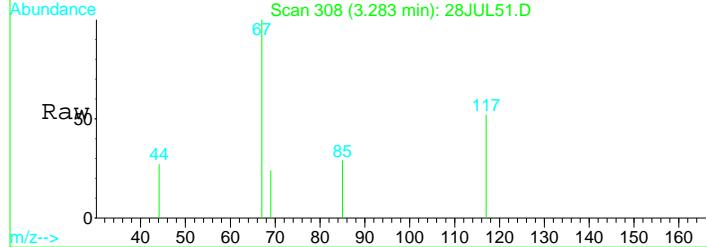
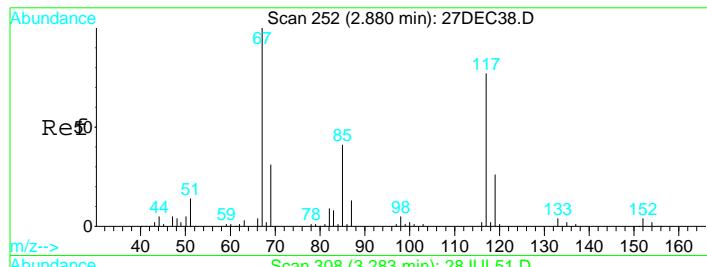
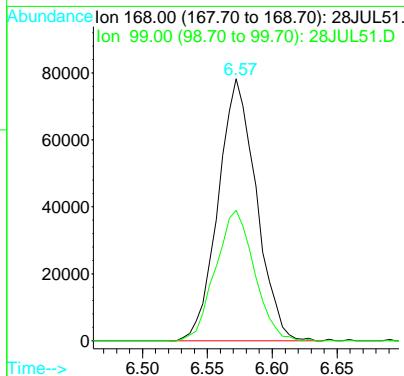
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration





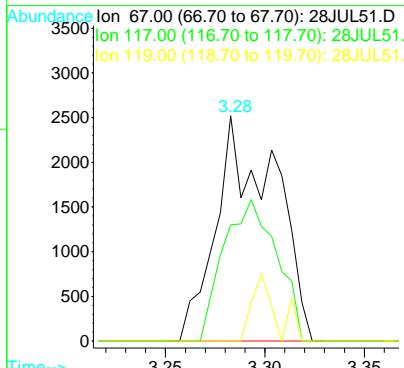
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 28JUL51.D
 Acq: 29 Jul 2017 2:40 am

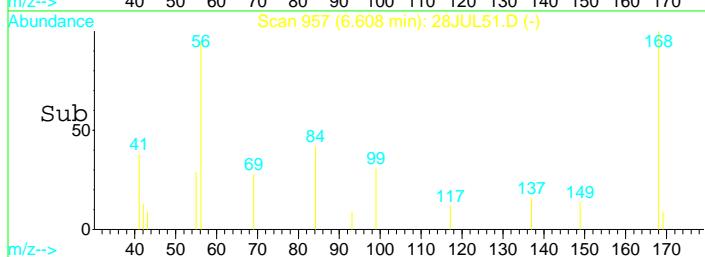
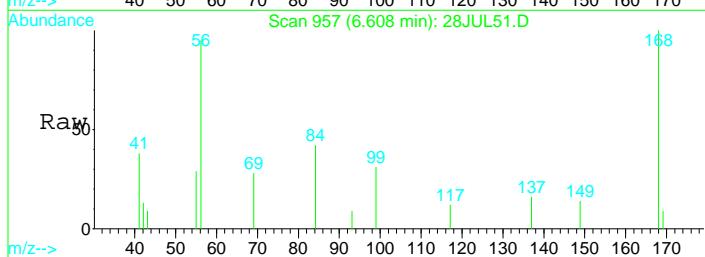
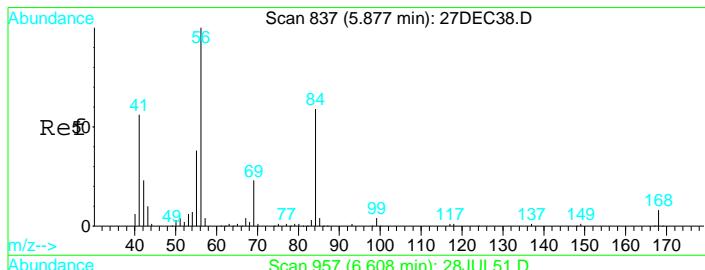
Tgt Ion: 168 Resp: 159665
 Ion Ratio Lower Upper
 168 100
 99 50.6 36.1 67.1



#4
 1,2-dichlorotrifluoroethane
 Concen: 0.49 ug/L
 RT: 3.28 min Scan# 308
 Delta R.T. -0.01 min
 Lab File: 28JUL51.D
 Acq: 29 Jul 2017 2:40 am

Tgt Ion: 67 Resp: 5137
 Ion Ratio Lower Upper
 67 100
 117 57.2 36.7 68.1
 119 9.4 5.9 10.9

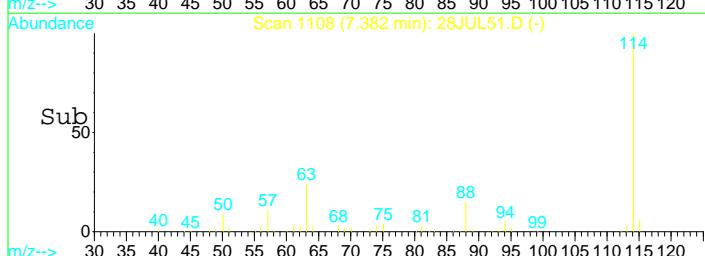
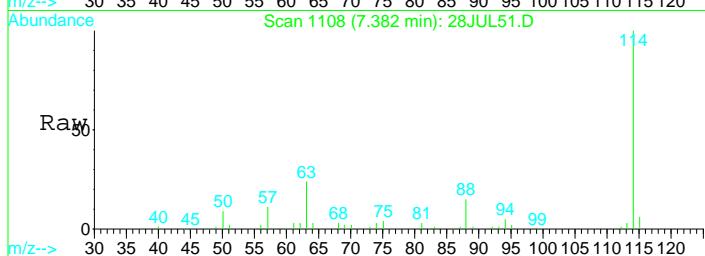
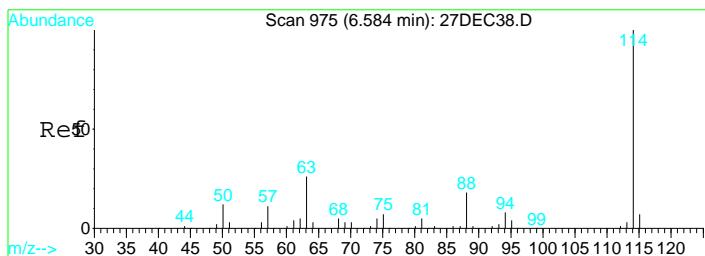
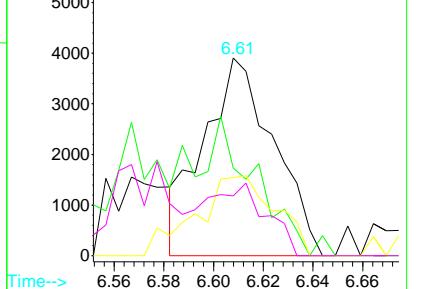




#27
Cyclohexane
Concen: 0.37 ug/L
RT: 6.61 min Scan# 957
Delta R.T. -0.00 min
Lab File: 28JUL51.D
Acq: 29 Jul 2017 2:40 am

Tgt Ion: 56 Resp: 7680
Ion Ratio Lower Upper
56 100
84 0.0 29.5 54.7#
41 45.5 26.4 49.0
55 32.4 13.9 25.9#

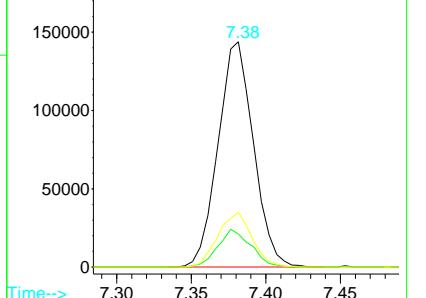
Abundance Ion 56.10 (55.80 to 56.80): 28JUL51.D
Ion 84.10 (83.80 to 84.80): 28JUL51.D
Ion 41.10 (40.80 to 41.80): 28JUL51.D
Ion 55.10 (54.80 to 55.80): 28JUL51.D

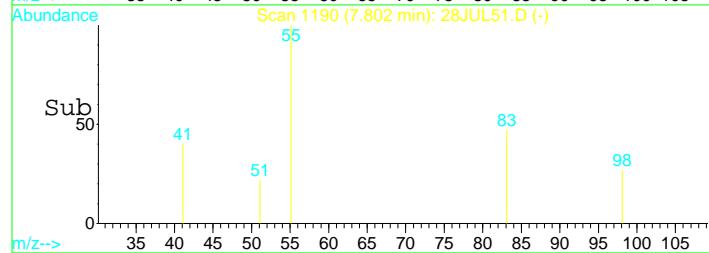
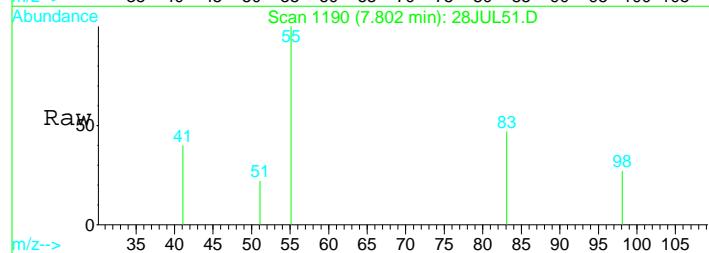
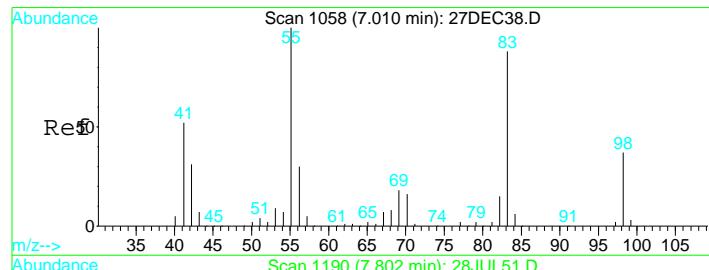


#29
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.38 min Scan# 1108
Delta R.T. 0.00 min
Lab File: 28JUL51.D
Acq: 29 Jul 2017 2:40 am

Tgt Ion: 114 Resp: 237447
Ion Ratio Lower Upper
114 100
88 15.7 11.1 20.7
63 23.4 16.4 30.4

Abundance Ion 114.00 (113.70 to 114.70): 28JUL51.D
Ion 88.00 (87.70 to 88.70): 28JUL51.D
Ion 63.10 (62.80 to 63.80): 28JUL51.D



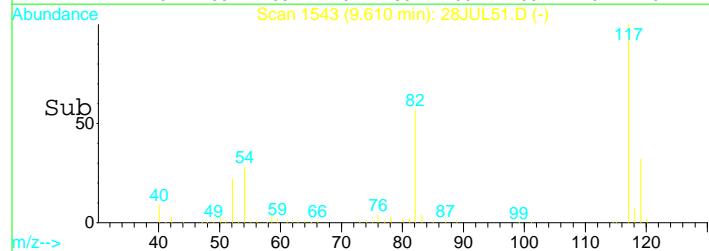
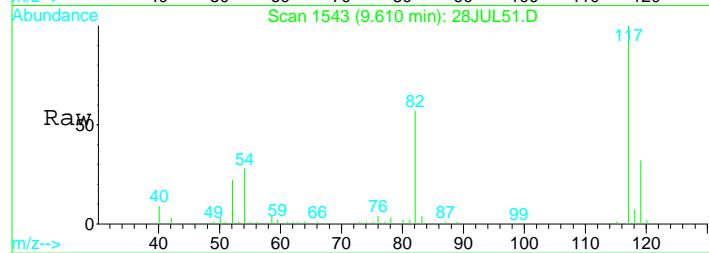
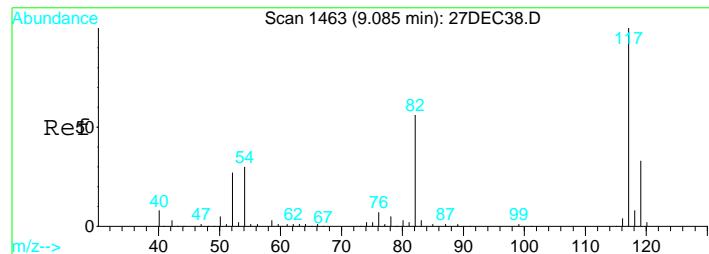
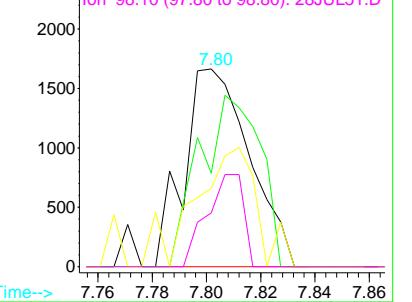


#31
Methylcyclohexane
Concen: 0.19 ug/L
RT: 7.80 min Scan# 1190
Delta R.T. -0.00 min
Lab File: 28JUL51.D
Acq: 29 Jul 2017 2:40 am

Tgt Ion: 55 Resp: 2805

Ion	Ratio	Lower	Upper
55	100		
83	79.7	56.7	105.3
41	57.9	34.9	64.9
98	26.1	28.3	52.5

Abundance
Ion 55.10 (54.80 to 55.80): 28JUL51.D
Ion 83.10 (82.80 to 83.80): 28JUL51.D
Ion 41.10 (40.80 to 41.80): 28JUL51.D
Ion 98.10 (97.80 to 98.80): 28JUL51.D

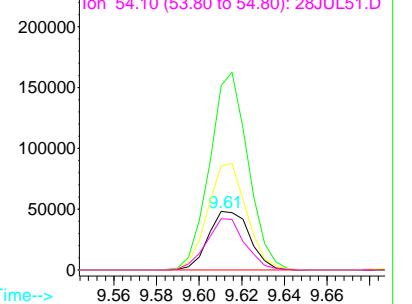


#36
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.61 min Scan# 1543
Delta R.T. -0.00 min
Lab File: 28JUL51.D
Acq: 29 Jul 2017 2:40 am

Tgt Ion: 119 Resp: 65236

Ion	Ratio	Lower	Upper
119	100		
117	312.9	217.1	403.3
82	171.1	122.7	227.9
54	81.3	55.2	102.6

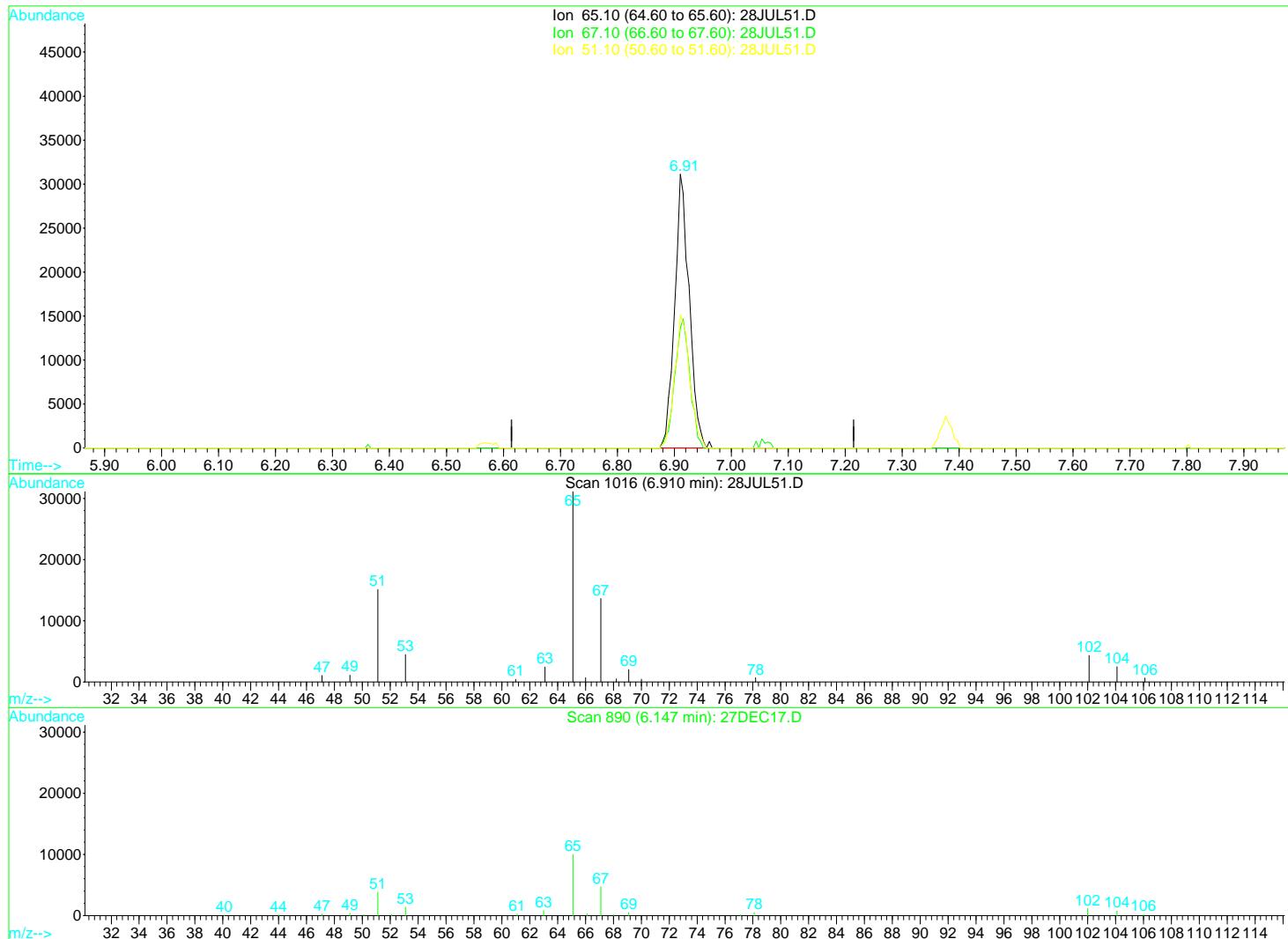
Abundance
Ion 119.00 (118.70 to 119.70): 28JUL51.D
Ion 117.00 (116.70 to 117.70): 28JUL51.D
Ion 82.10 (81.80 to 82.80): 28JUL51.D
Ion 54.10 (53.80 to 54.80): 28JUL51.D



Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL51.D Vial: 51
 Acq On : 29 Jul 2017 2:40 am Operator: MGC
 Sample : 1720267-01 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 2:54 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Multiple Level Calibration



TIC: 28JUL51.D

(21) 1,2-dichloroethane d4 SMC #1 (S)

6.91min 11.82ug/L

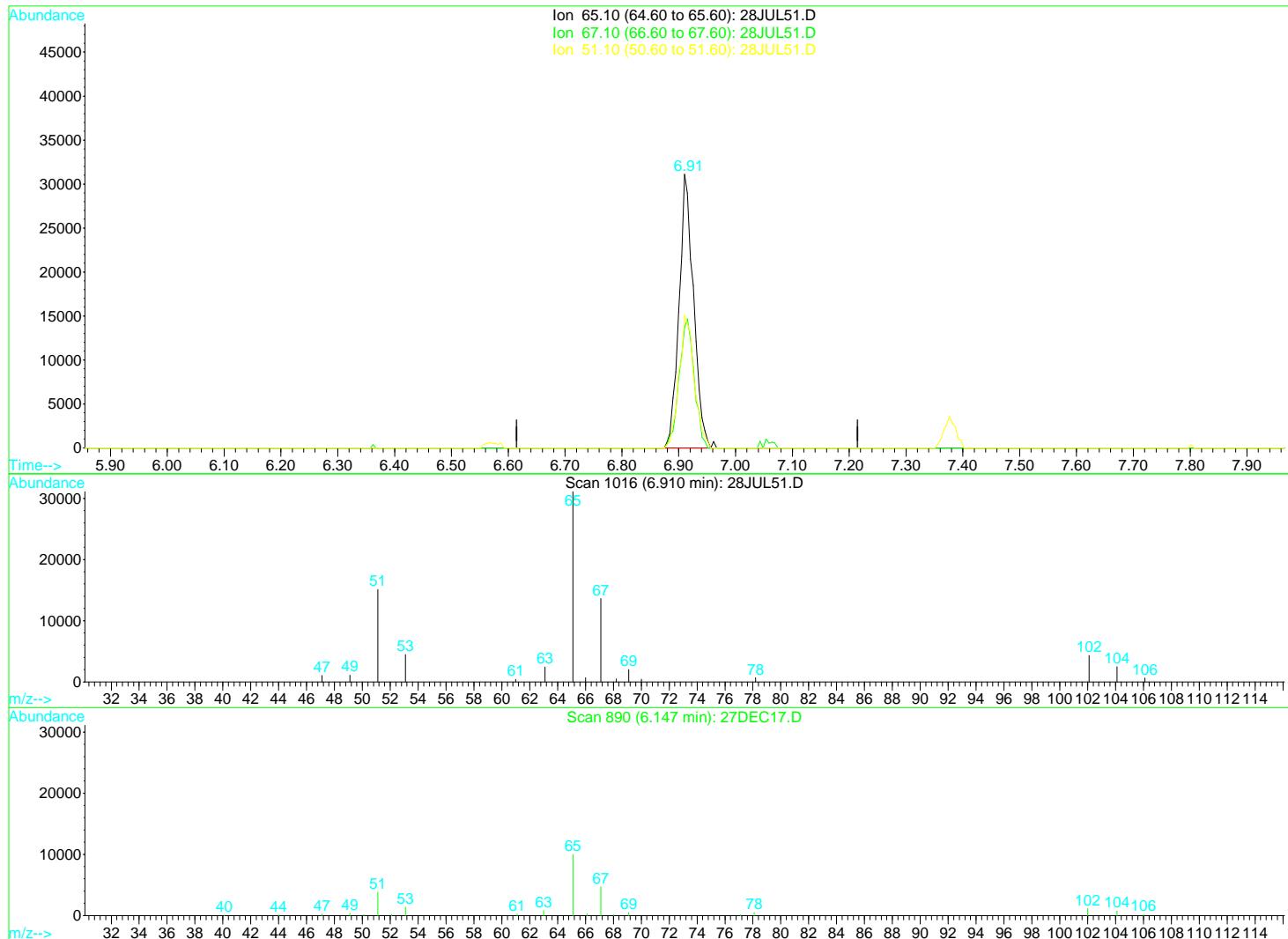
response 55120

Ion	Exp%	Act%
65.10	100	100
67.10	51.70	48.97
51.10	60.00	50.80
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL51.D Vial: 51
 Acq On : 29 Jul 2017 2:40 am Operator: MGC
 Sample : 1720267-01 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:18 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Multiple Level Calibration



(21) 1,2-dichloroethane d4 SMC #1 (S)

6.91min 11.77ug/L m

response 54893

Ion	Exp%	Act%
65.10	100	100
67.10	51.70	49.18
51.10	60.00	51.01
0.00	0.00	0.00

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL52.D Vial: 52
 Acq On : 29 Jul 2017 3:03 am Operator: MGC
 Sample : 1720267-02 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00

MS Integration Params: rteint.p
 Quant Time: Jul 29 9:20 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	152256	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	220797	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	64061	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	47980	10.79	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	107.90%
31) Toluene d8 SMC#2	8.60	98	266207	9.76	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.60%
49) Bromofluorobenzene SMC#3	10.34	95	90969	9.51	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	95.10%

Target Compounds

					Qvalue	
4) Vinyl chloride	2.07	62	5281	0.46	ug/L	# 23
8) 1,1,2-Trichloro-1,2,2-trif	3.52	101	2220	0.34	ug/L	# 70
12) T-1,2-dichloroethene	4.50	96	1869	0.25	ug/L	# 67
13) 1,1-Dichloroethane	5.06	63	18358	1.13	ug/L	92
15) Cis-1,2-dichloroethene	5.84	96	6375	0.80	ug/L	94
23) Benzene	6.93	78	2599	0.08	ug/L	# 1
25) Trichloroethene	7.60	130	3180	0.42	ug/L	# 74
32) Toluene	8.65	92	4520	0.24	ug/L	92
42) Ethylbenzene	9.69	106	11241	0.90	ug/L	91
43) P+m-Xylene	9.77	106	29651	1.94	ug/L	89
44) O-Xylene	10.01	106	29380	2.08	ug/L	# 79
47) Isopropylbenzene	10.23	105	13094	0.36	ug/L	100
51) n-propylbenzene	10.47	91	20926	0.44	ug/L	92
53) 1,3,5-trimethylbenzene	10.57	105	8121	0.27	ug/L	97
57) 1,2,4-trimethylbenzene	10.79	105	77355	2.58	ug/L	93
58) sec-butylbenzene	10.89	105	6608	0.16	ug/L	# 68
59) 4-isopropyltoluene	10.97	119	4689m	0.14	ug/L	
62) n-butylbenzene	11.20	91	2013	0.07	ug/L	# 13
63) 1,2-Dichlorobenzene	11.24	146	2070	0.15	ug/L	# 78
68) naphthalene	12.26	128	3426	0.34	ug/L	100

(#) = qualifier out of range (m) = manual integration

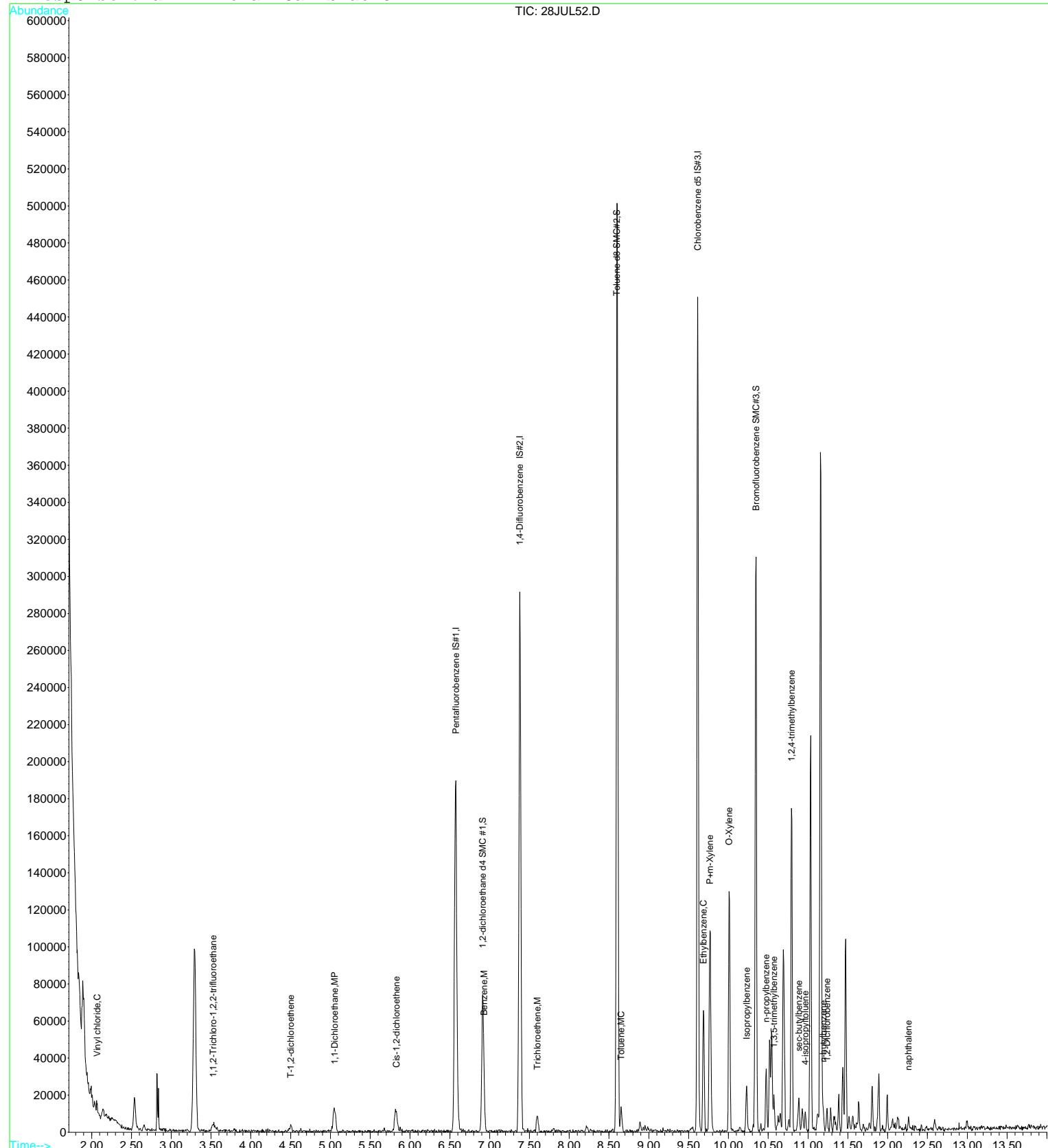
28JUL52.D 82605.M Sat Jul 29 09:26:08 2017

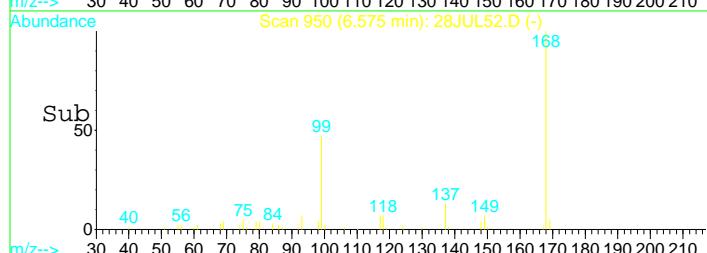
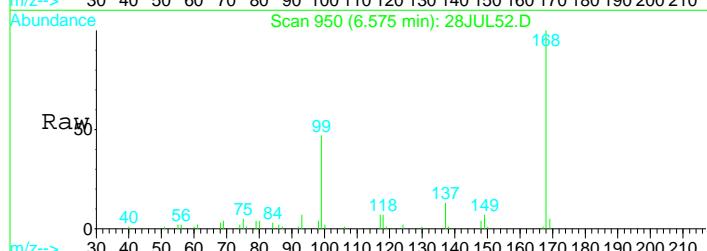
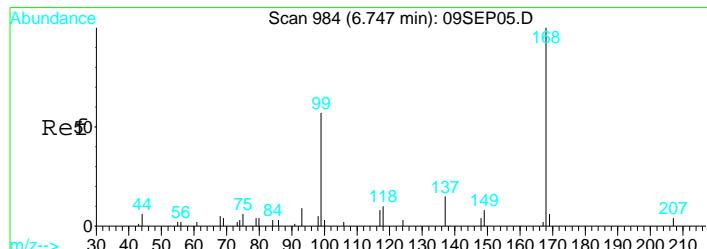
Page 1

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL52.D Vial: 52
 Acq On : 29 Jul 2017 3:03 am Operator: MGC
 Sample : 1720267-02 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:20 2017 Quant Results File: 82605.RES

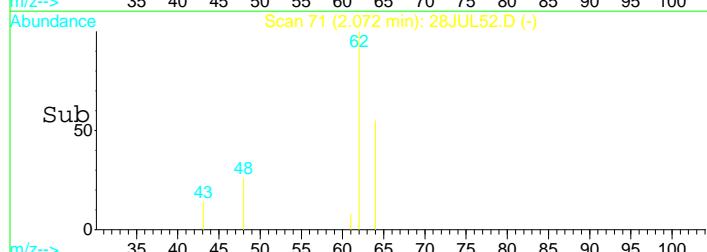
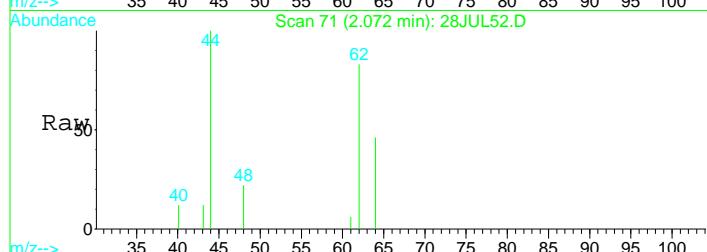
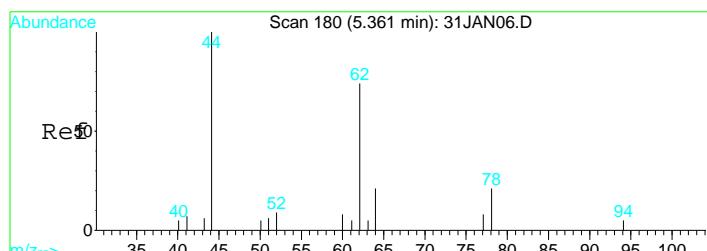
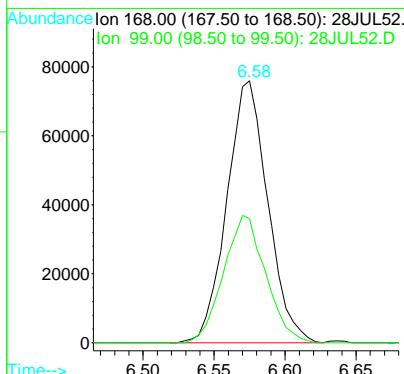
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration





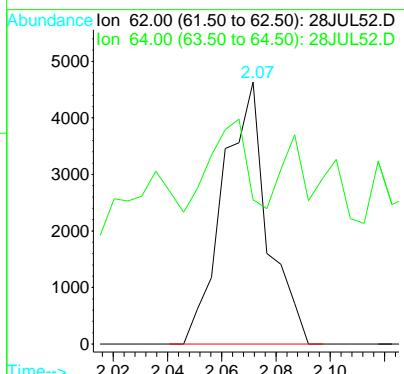
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.58 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 28JUL52.D
 Acq: 29 Jul 2017 3:03 am

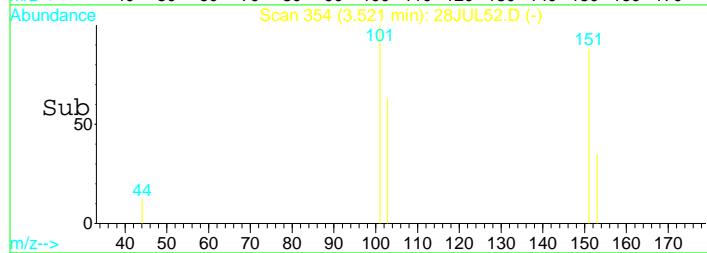
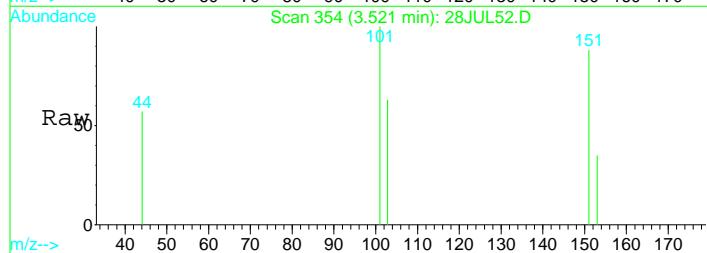
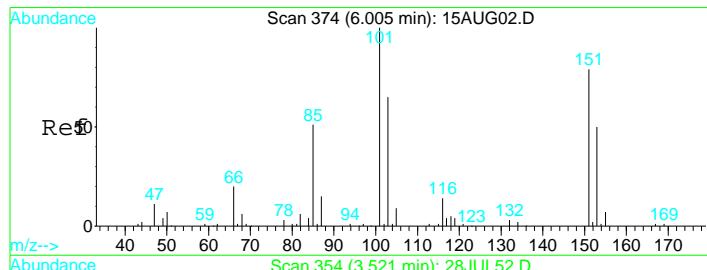
Tgt Ion: 168 Resp: 152256
 Ion Ratio Lower Upper
 168 100
 99 49.9 38.7 71.9



#4
 Vinyl chloride
 Concen: 0.46 ug/L
 RT: 2.07 min Scan# 71
 Delta R.T. -0.00 min
 Lab File: 28JUL52.D
 Acq: 29 Jul 2017 3:03 am

Tgt Ion: 62 Resp: 5281
 Ion Ratio Lower Upper
 62 100
 64 0.0 39.3 72.9#

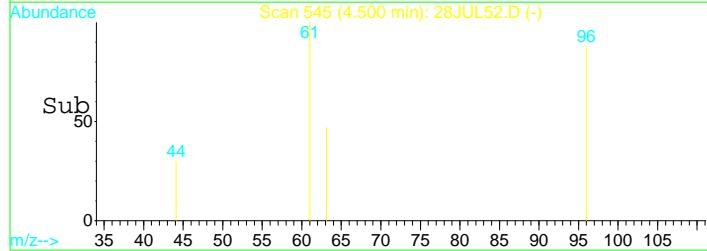
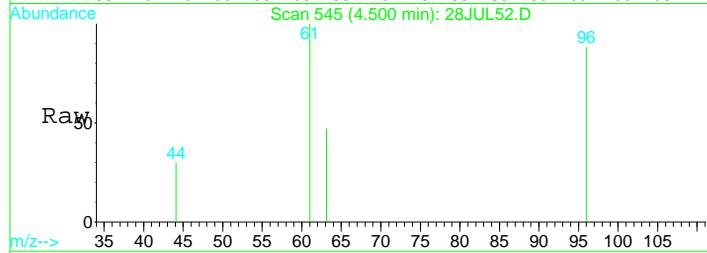
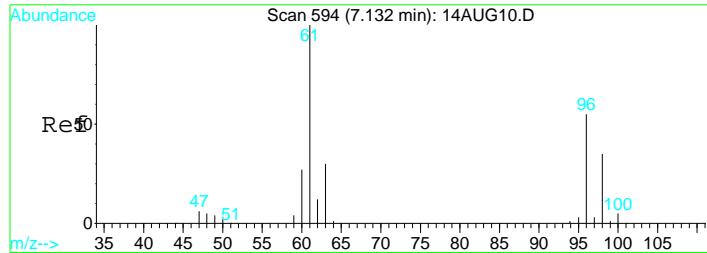
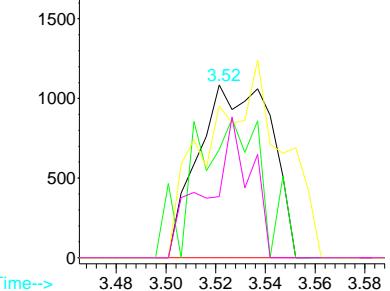




#8
 1,1,2-Trichloro-1,2,2-trifluoroethane
 Concen: 0.34 ug/L
 RT: 3.52 min Scan# 354
 Delta R.T. -0.01 min
 Lab File: 28JUL52.D
 Acq: 29 Jul 2017 3:03 am

Tgt Ion: 101 Resp: 2220
 Ion Ratio Lower Upper
 101 100
 103 75.5 35.8 66.4#
 151 114.7 62.6 116.3
 153 48.7 22.4 41.6#

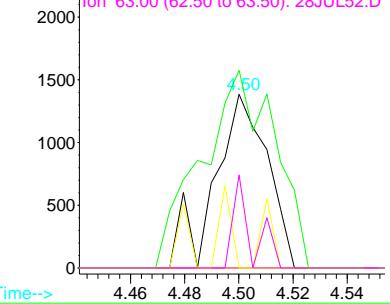
Abundance
 Ion 100.90 (100.40 to 101.40): 28JUL52.
 Ion 102.90 (102.40 to 103.40): 28JUL52.
 Ion 150.90 (150.40 to 151.40): 28JUL52.
 Ion 152.90 (152.40 to 153.40): 28JUL52.

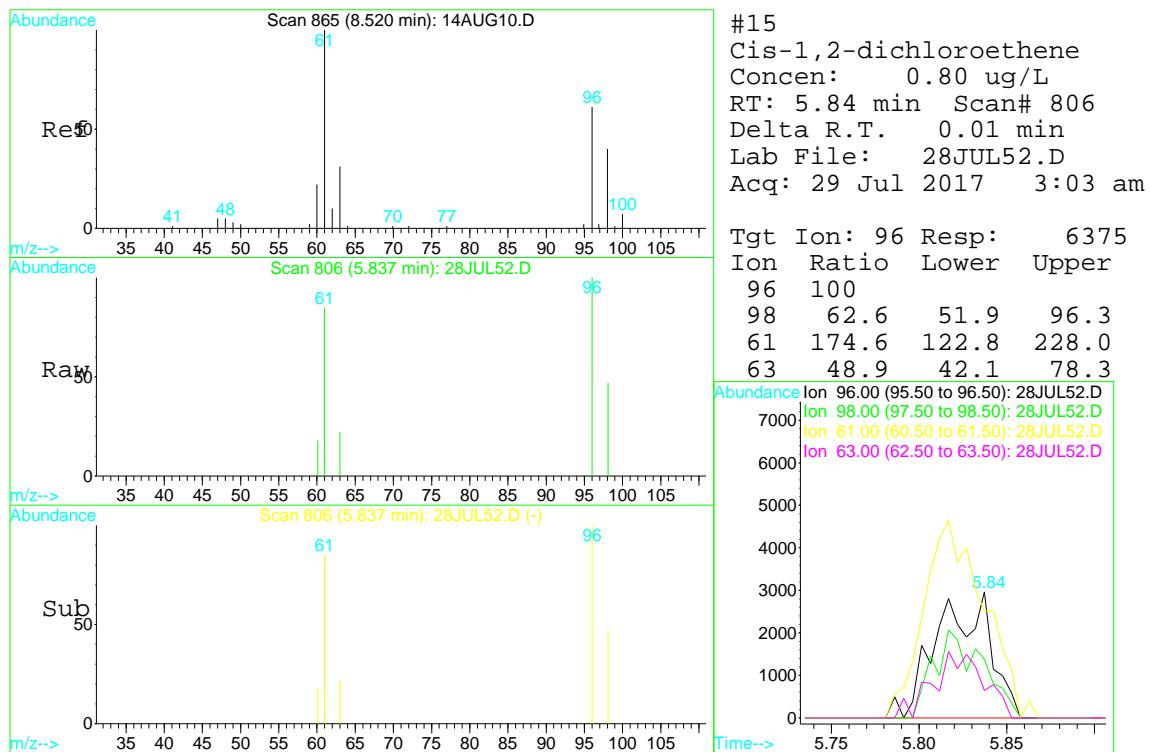
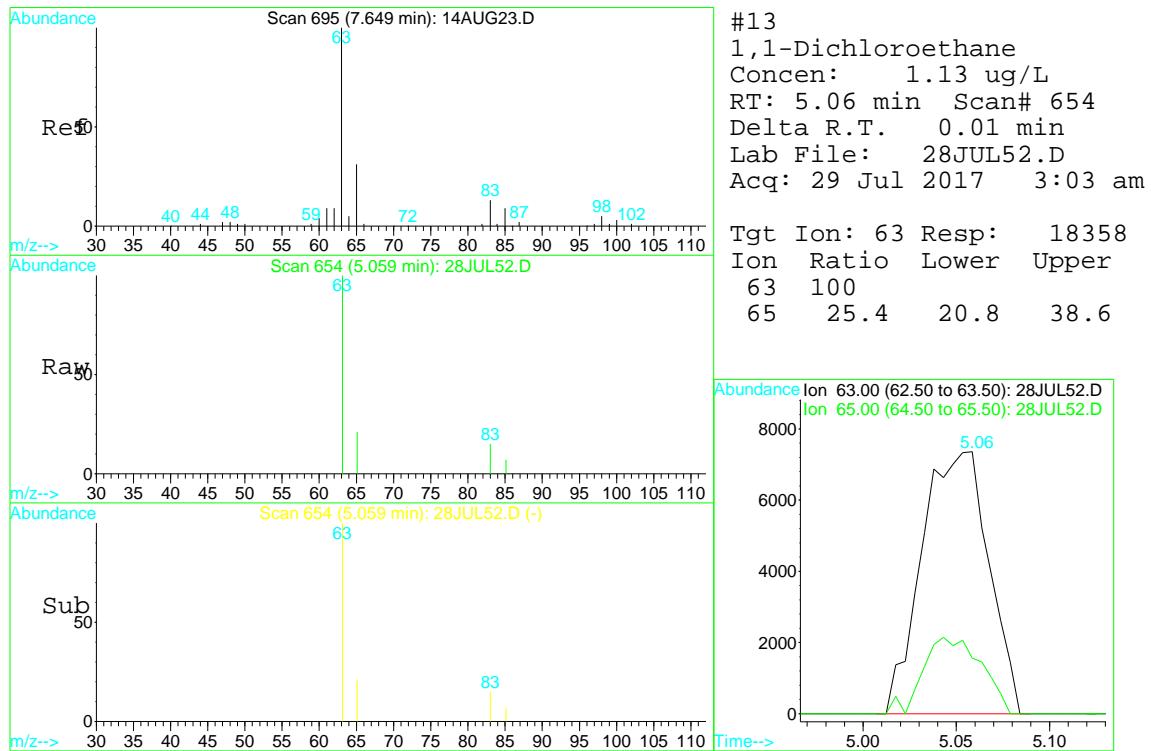


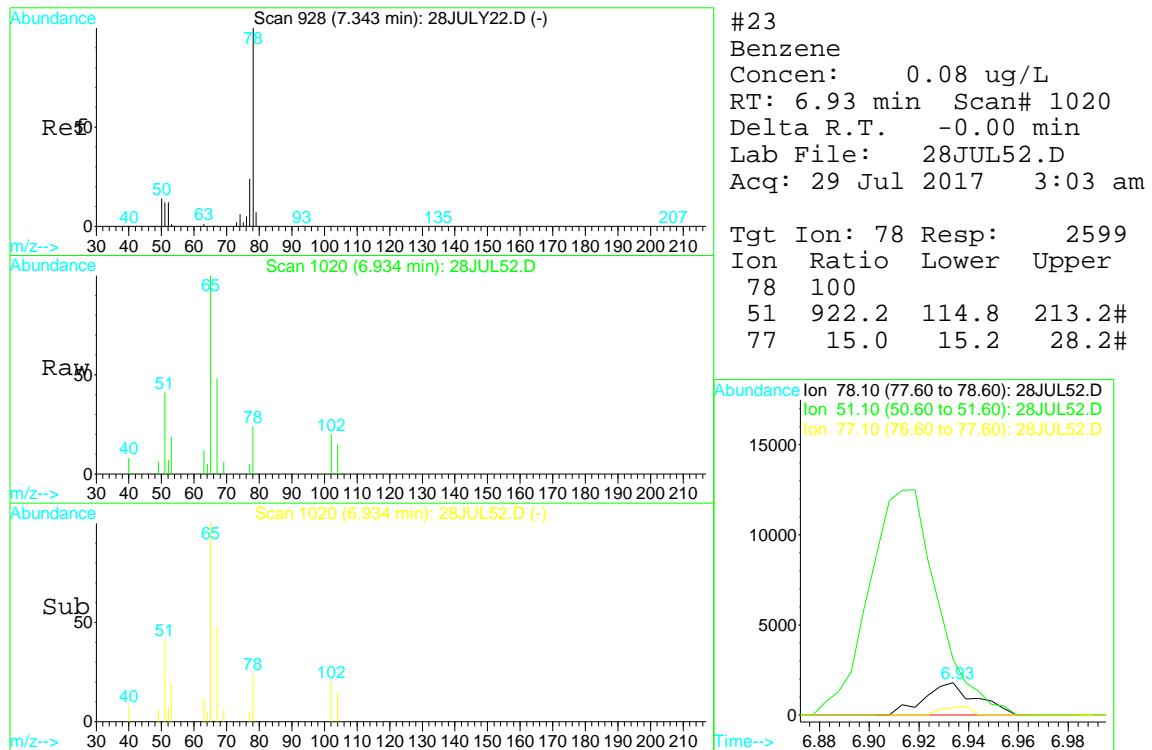
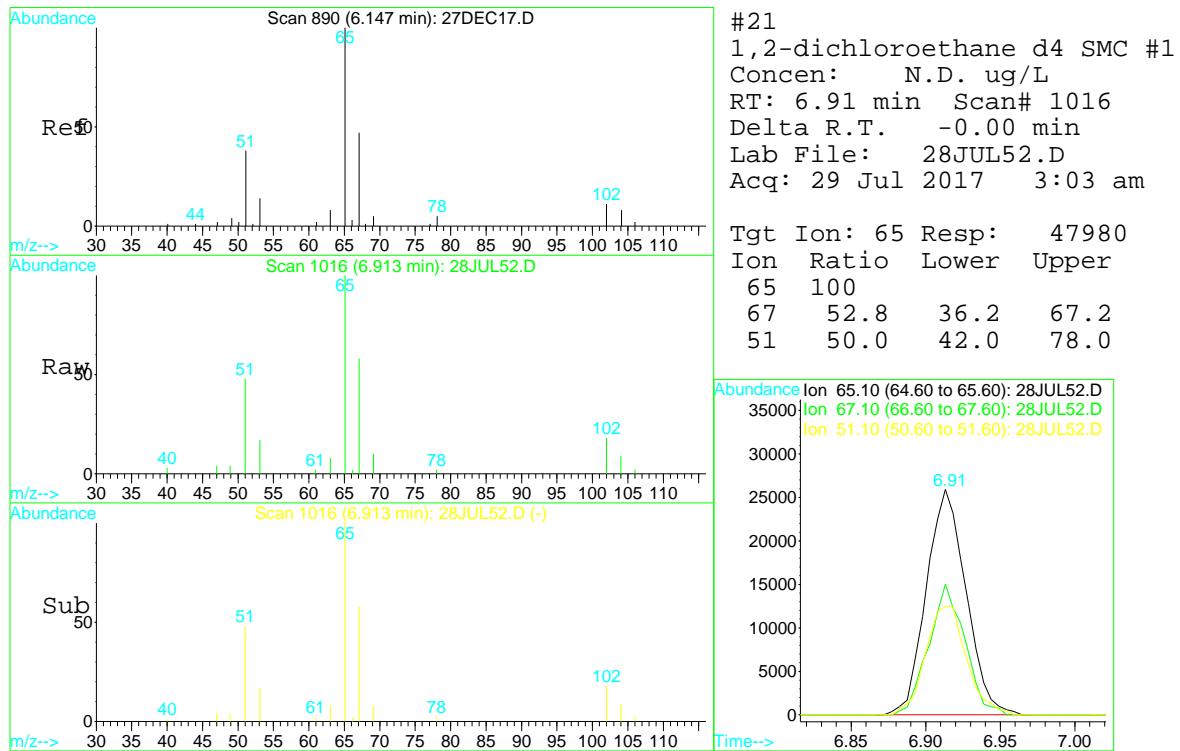
#12
 T-1,2-dichloroethene
 Concen: 0.25 ug/L
 RT: 4.50 min Scan# 545
 Delta R.T. -0.00 min
 Lab File: 28JUL52.D
 Acq: 29 Jul 2017 3:03 am

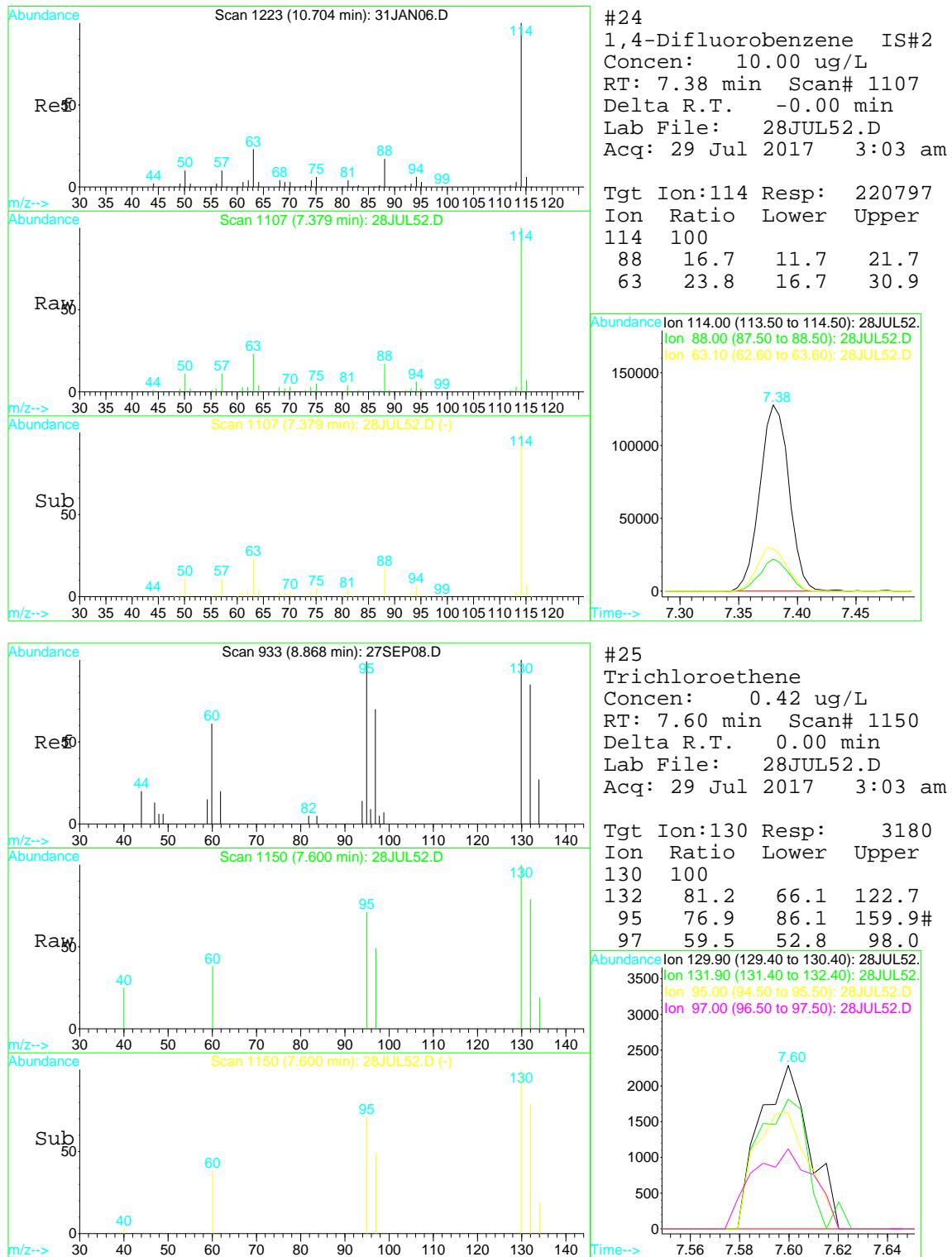
Tgt Ion: 96 Resp: 1869
 Ion Ratio Lower Upper
 96 100
 61 159.0 129.4 240.4
 98 10.8 41.5 77.1#
 63 18.8 39.3 73.1#

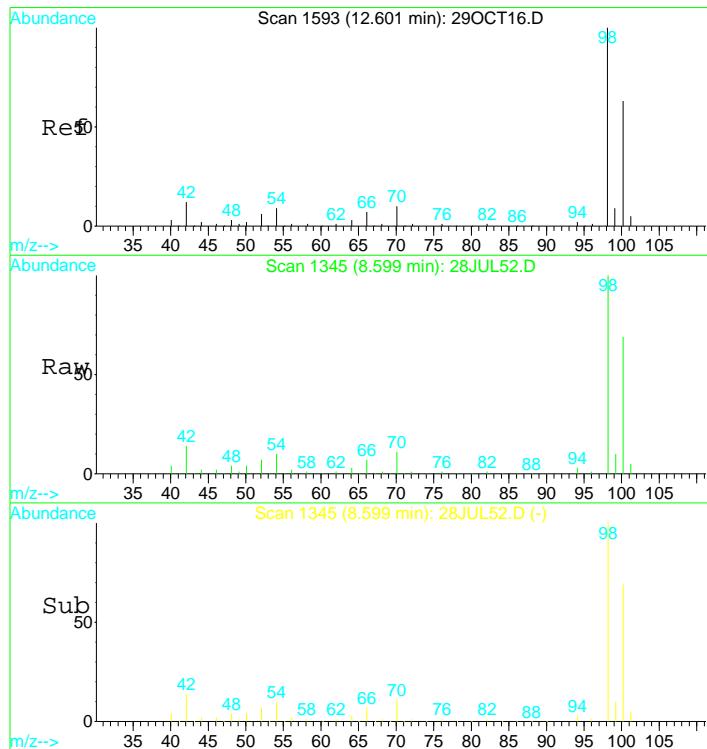
Abundance
 Ion 96.00 (95.50 to 96.50): 28JUL52.D
 Ion 61.00 (60.50 to 61.50): 28JUL52.D
 Ion 98.00 (97.50 to 98.50): 28JUL52.D
 Ion 63.00 (62.50 to 63.50): 28JUL52.D





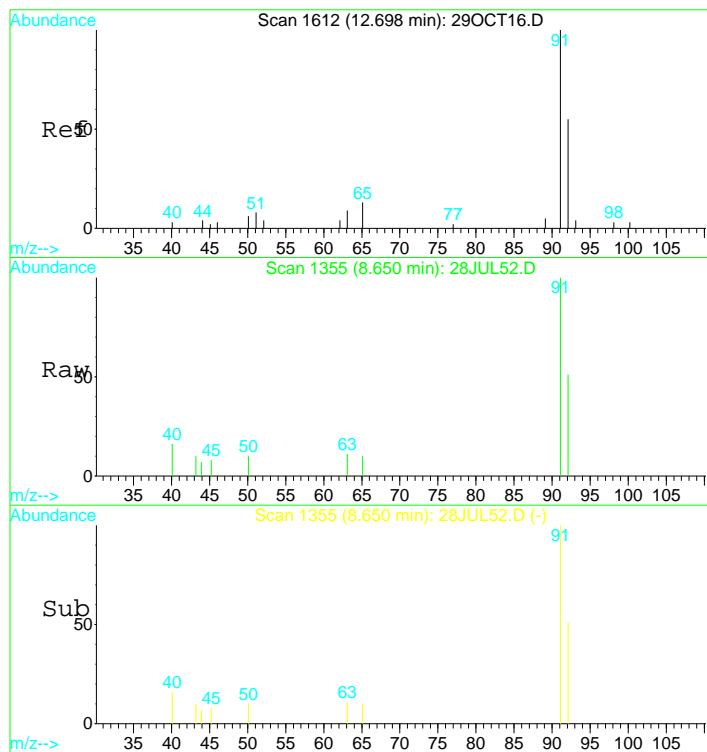
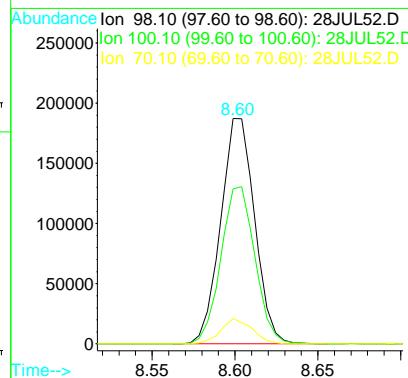






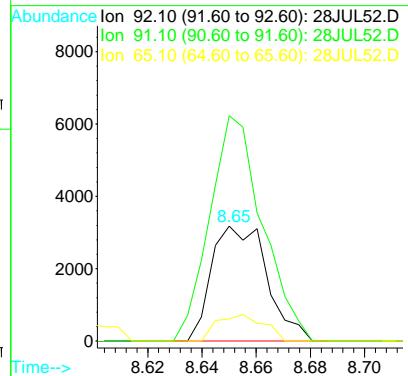
#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1345
 Delta R.T. -0.00 min
 Lab File: 28JUL52.D
 Acq: 29 Jul 2017 3:03 am

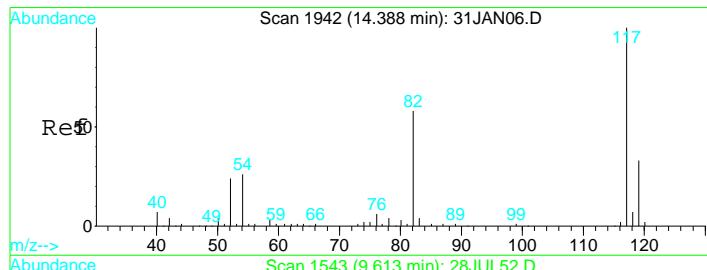
Tgt Ion: 98 Resp: 266207
 Ion Ratio Lower Upper
 98 100
 100 69.8 49.7 92.3
 70 10.4 7.3 13.7



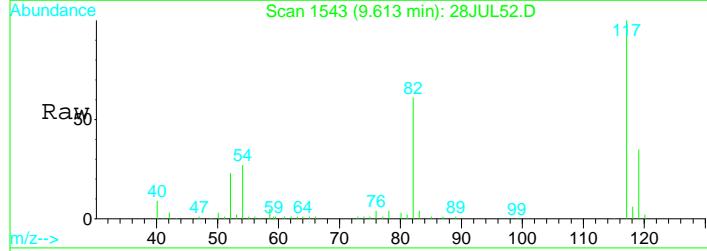
#32
 Toluene
 Concen: 0.24 ug/L
 RT: 8.65 min Scan# 1355
 Delta R.T. -0.00 min
 Lab File: 28JUL52.D
 Acq: 29 Jul 2017 3:03 am

Tgt Ion: 92 Resp: 4520
 Ion Ratio Lower Upper
 92 100
 91 186.4 122.6 227.6
 65 19.5 16.5 30.7

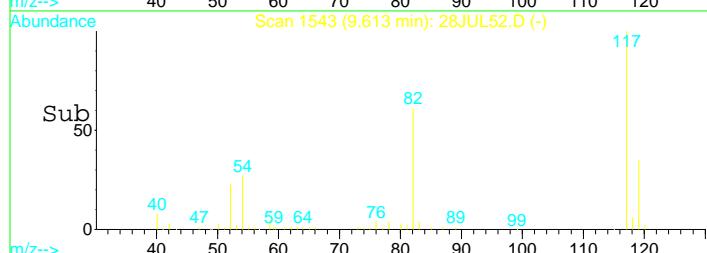




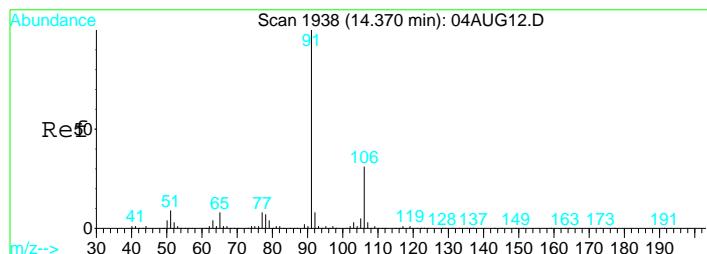
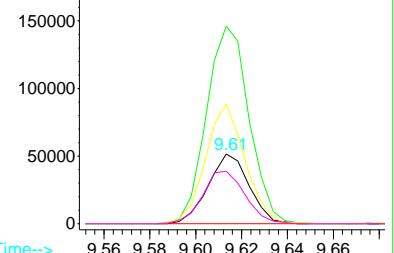
#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.61 min Scan# 1543
 Delta R.T. -0.00 min
 Lab File: 28JUL52.D
 Acq: 29 Jul 2017 3:03 am



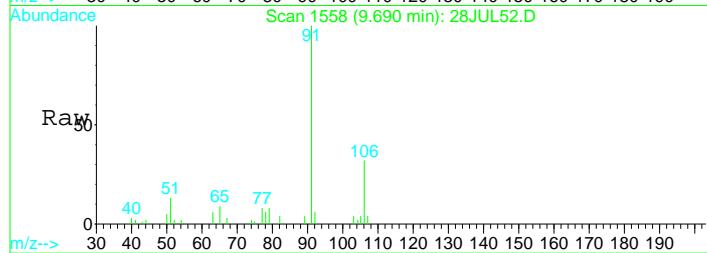
Tgt Ion:119 Resp: 64061
 Ion Ratio Lower Upper
 119 100
 117 293.5 214.5 398.4
 82 164.9 117.7 218.7
 54 78.0 55.2 102.4



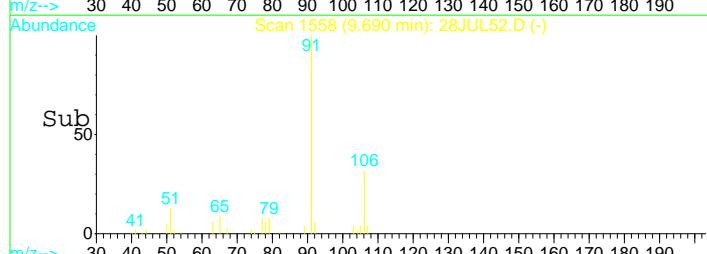
Abundance
 Ion 119.00 (118.50 to 119.50): 28JUL52.
 Ion 117.00 (116.50 to 117.50): 28JUL52.
 Ion 82.10 (81.60 to 82.60): 28JUL52.D
 Ion 54.10 (53.60 to 54.60): 28JUL52.D



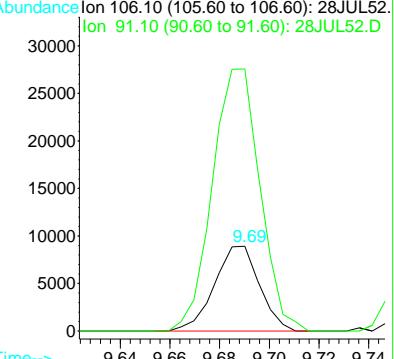
#42
 Ethylbenzene
 Concen: 0.90 ug/L
 RT: 9.69 min Scan# 1558
 Delta R.T. 0.00 min
 Lab File: 28JUL52.D
 Acq: 29 Jul 2017 3:03 am

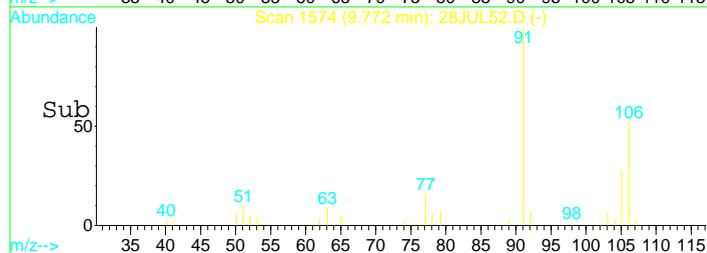
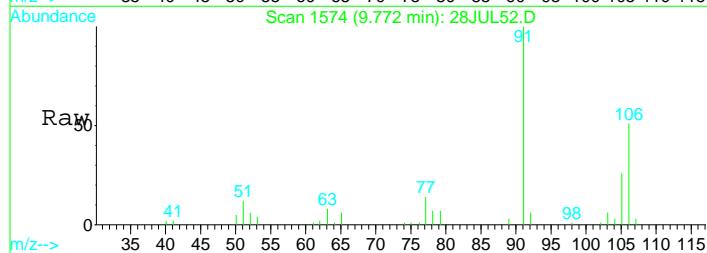
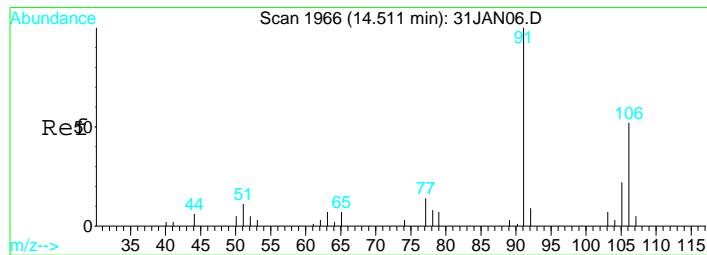


Tgt Ion:106 Resp: 11241
 Ion Ratio Lower Upper
 106 100
 91 326.2 241.5 448.5



Abundance
 Ion 106.10 (105.60 to 106.60): 28JUL52.
 Ion 91.10 (90.60 to 91.60): 28JUL52.D

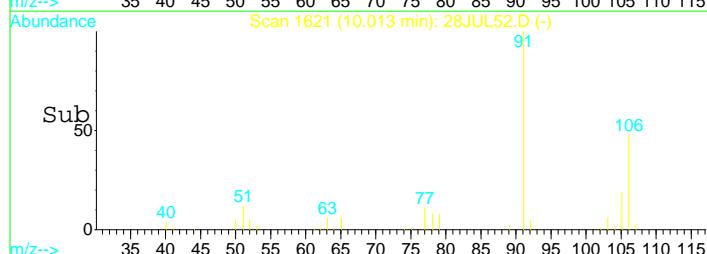
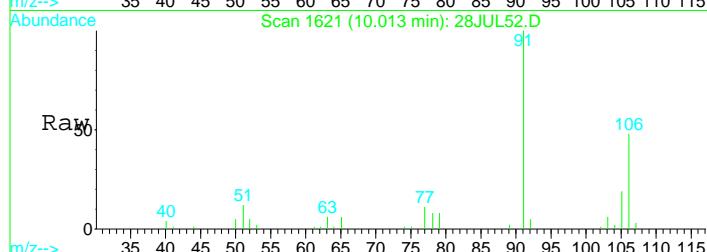
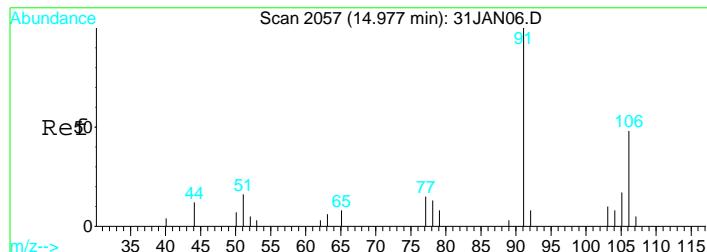
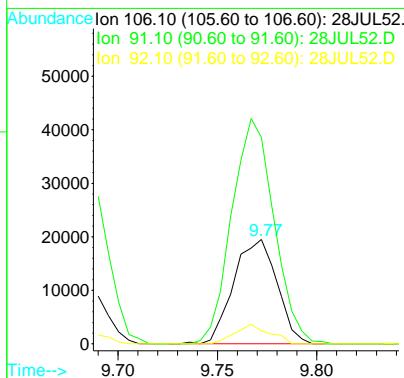




#43

P+m-Xylene
Concen: 1.94 ug/L
RT: 9.77 min Scan# 1574
Delta R.T. 0.00 min
Lab File: 28JUL52.D
Acq: 29 Jul 2017 3:03 am

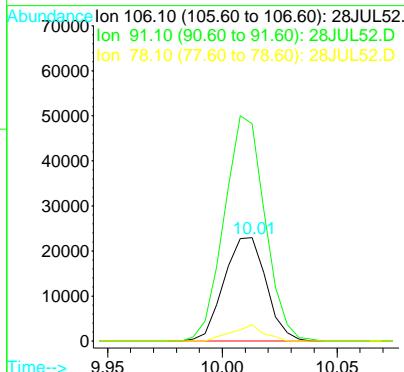
Tgt Ion:106 Resp: 29651
Ion Ratio Lower Upper
106 100
91 209.7 135.0 250.6
92 14.8 10.3 19.1

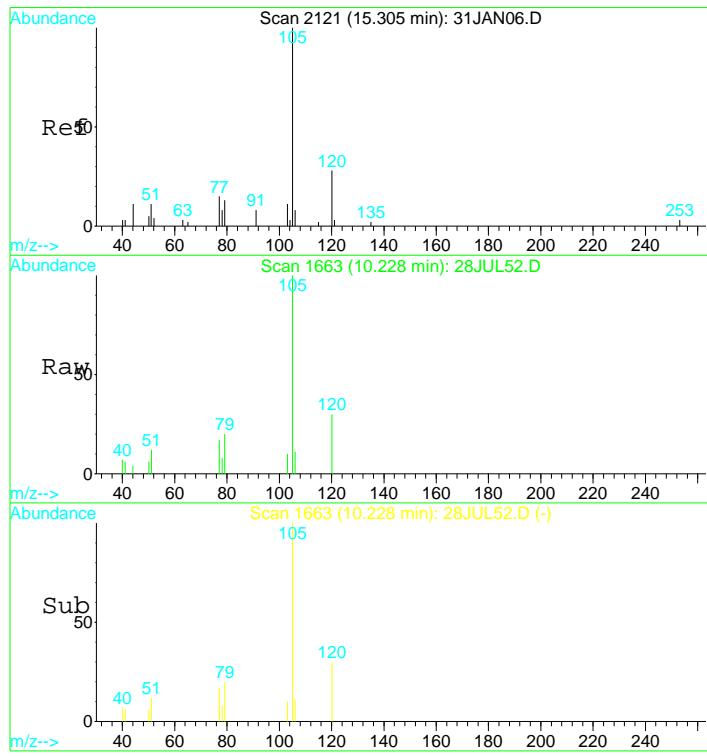


#44

O-Xylene
Concen: 2.08 ug/L
RT: 10.01 min Scan# 1621
Delta R.T. 0.00 min
Lab File: 28JUL52.D
Acq: 29 Jul 2017 3:03 am

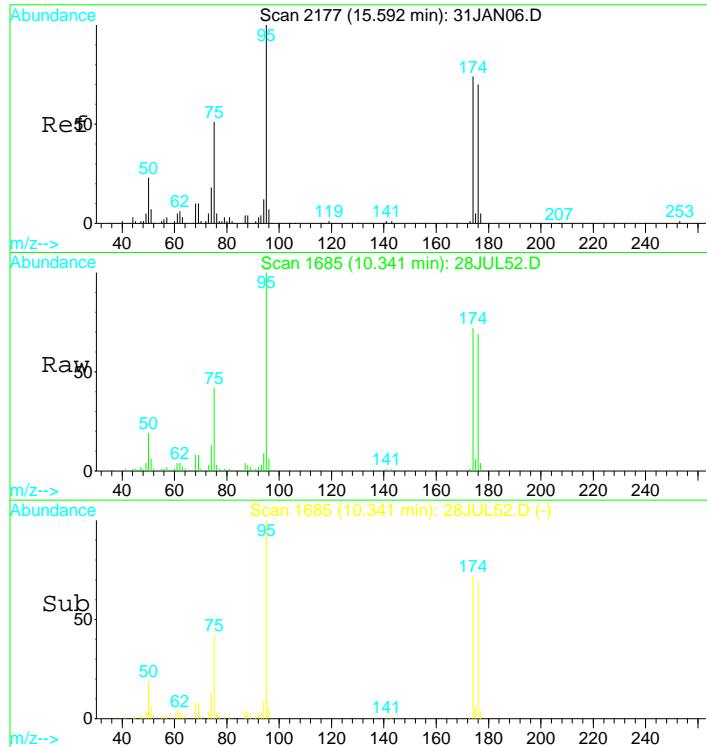
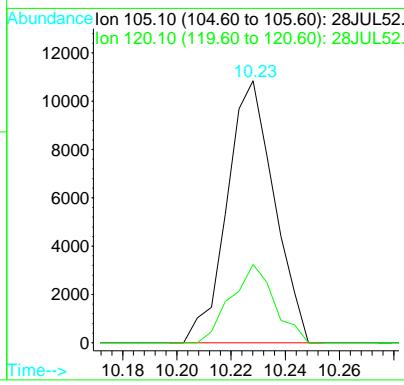
Tgt Ion:106 Resp: 29380
Ion Ratio Lower Upper
106 100
91 210.0 154.3 286.5
78 12.1 47.1 87.5#





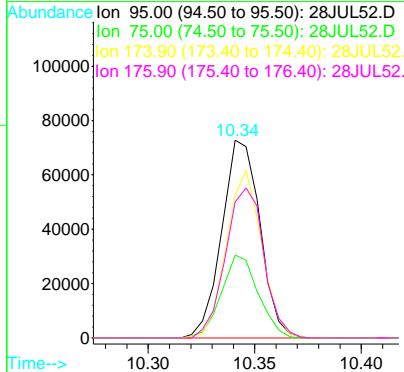
#47
 Isopropylbenzene
 Concen: 0.36 ug/L
 RT: 10.23 min Scan# 1663
 Delta R.T. -0.00 min
 Lab File: 28JUL52.D
 Acq: 29 Jul 2017 3:03 am

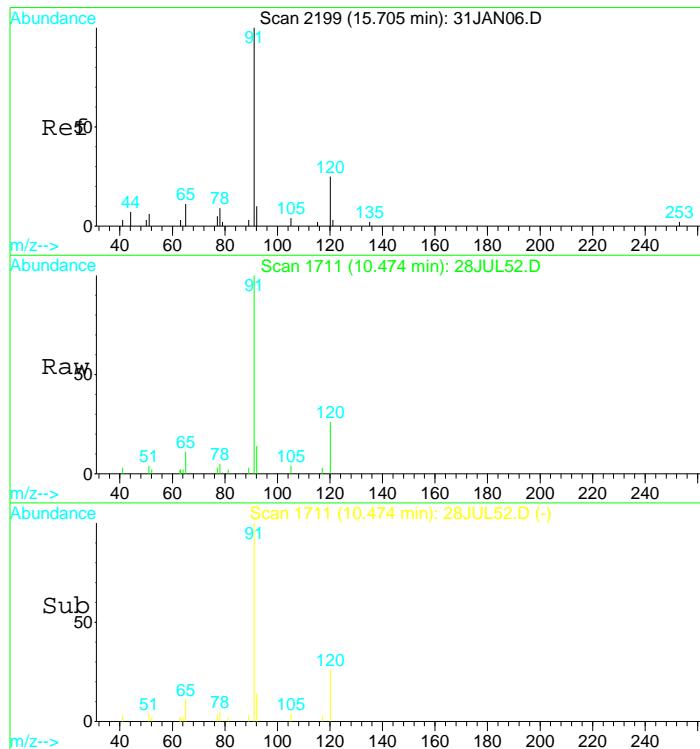
Tgt Ion: 105 Resp: 13094
 Ion Ratio Lower Upper
 105 100
 120 27.6 19.2 35.6



#49
 Bromofluorobenzene SMC#3
 Concen: Below ug/L
 RT: 10.34 min Scan# 1685
 Delta R.T. -0.00 min
 Lab File: 28JUL52.D
 Acq: 29 Jul 2017 3:03 am

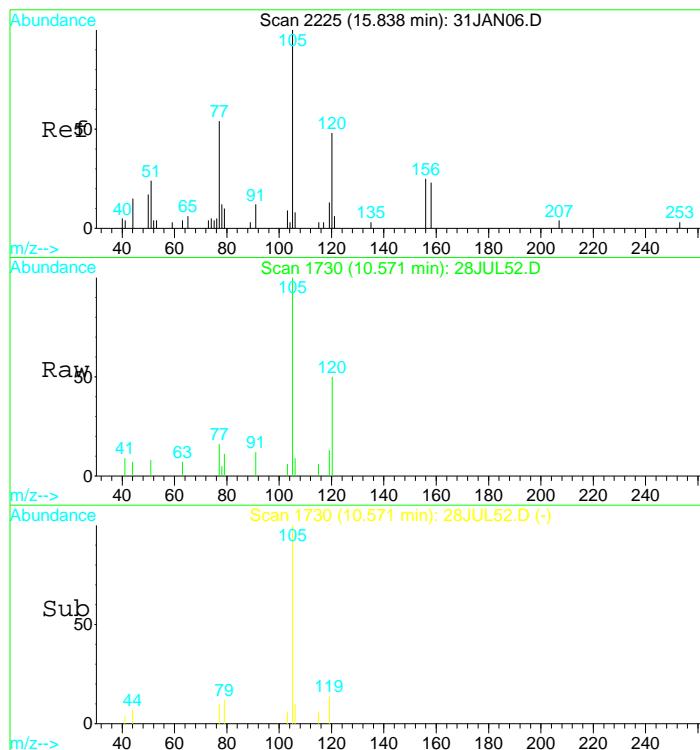
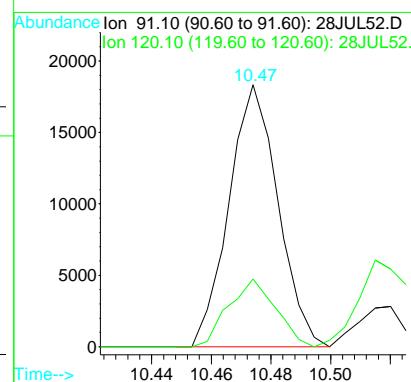
Tgt Ion: 95 Resp: 90969
 Ion Ratio Lower Upper
 95 100
 75 40.6 29.5 54.7
 174 78.3 52.3 97.1
 176 76.1 49.6 92.2





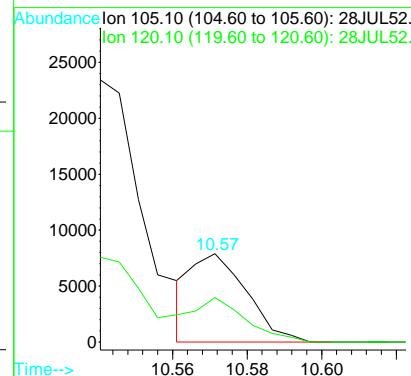
#51
n-propylbenzene
Concen: 0.44 ug/L
RT: 10.47 min Scan# 1711
Delta R.T. -0.00 min
Lab File: 28JUL52.D
Acq: 29 Jul 2017 3:03 am

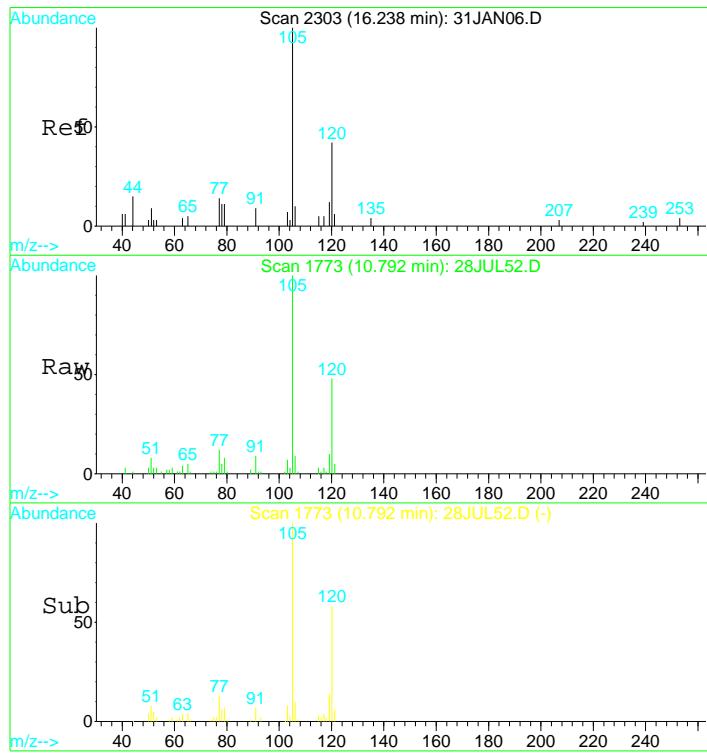
Tgt Ion: 91 Resp: 20926
Ion Ratio Lower Upper
91 100
120 24.9 14.8 27.6



#53
1,3,5-trimethylbenzene
Concen: 0.27 ug/L
RT: 10.57 min Scan# 1730
Delta R.T. -0.00 min
Lab File: 28JUL52.D
Acq: 29 Jul 2017 3:03 am

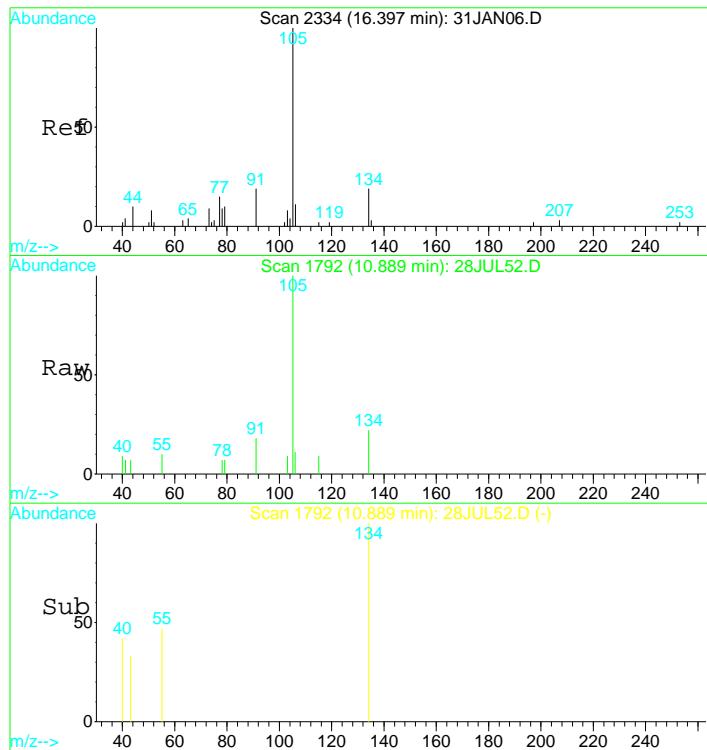
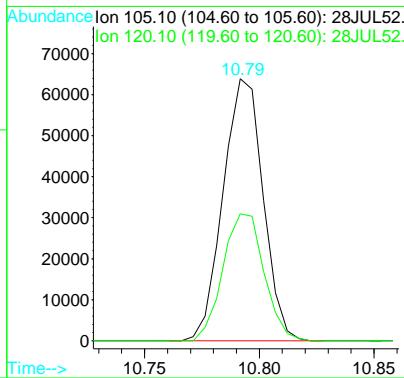
Tgt Ion: 105 Resp: 8121
Ion Ratio Lower Upper
105 100
120 46.6 33.8 62.8





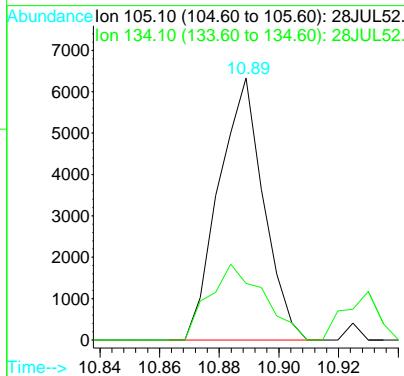
#57
 1, 2, 4-trimethylbenzene
 Concen: 2.58 ug/L
 RT: 10.79 min Scan# 1773
 Delta R.T. -0.00 min
 Lab File: 28JUL52.D
 Acq: 29 Jul 2017 3:03 am

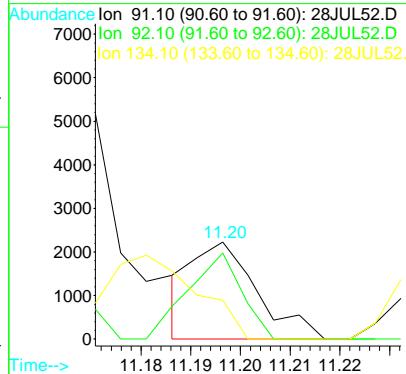
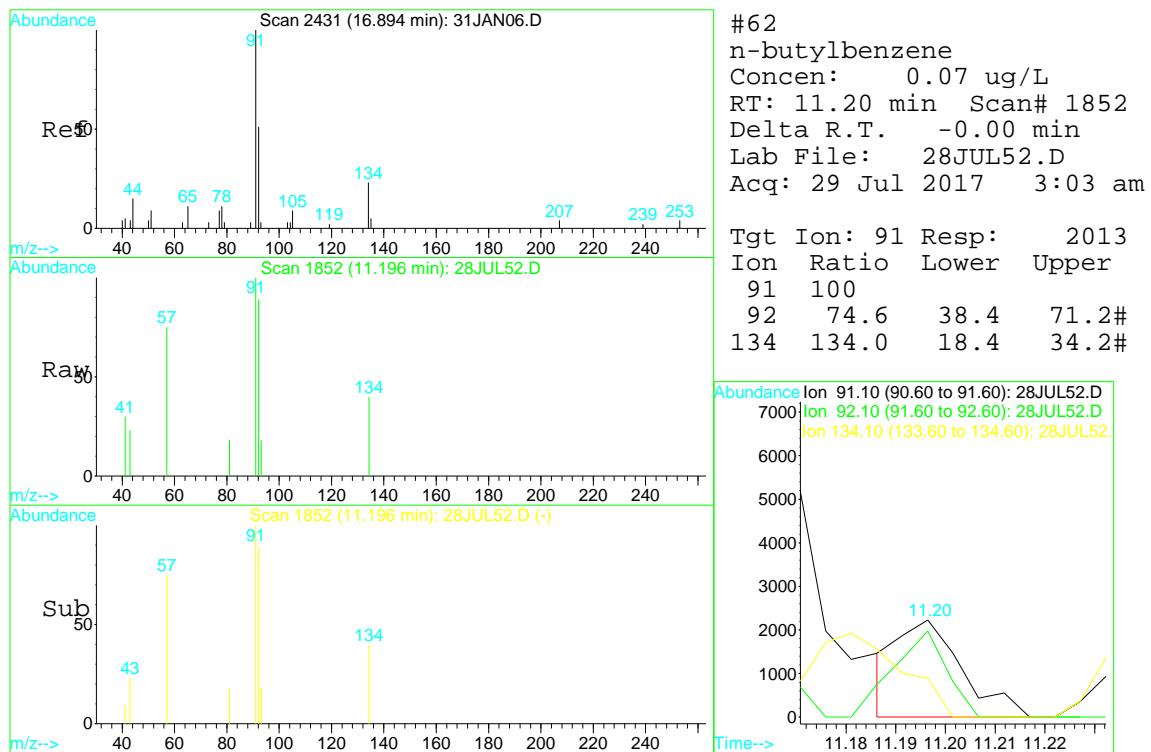
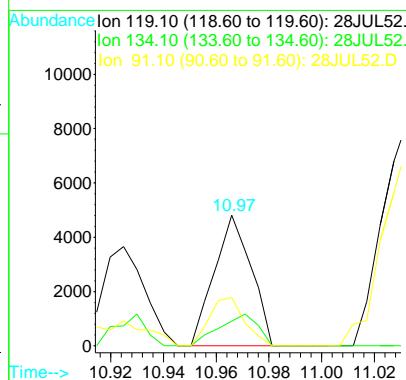
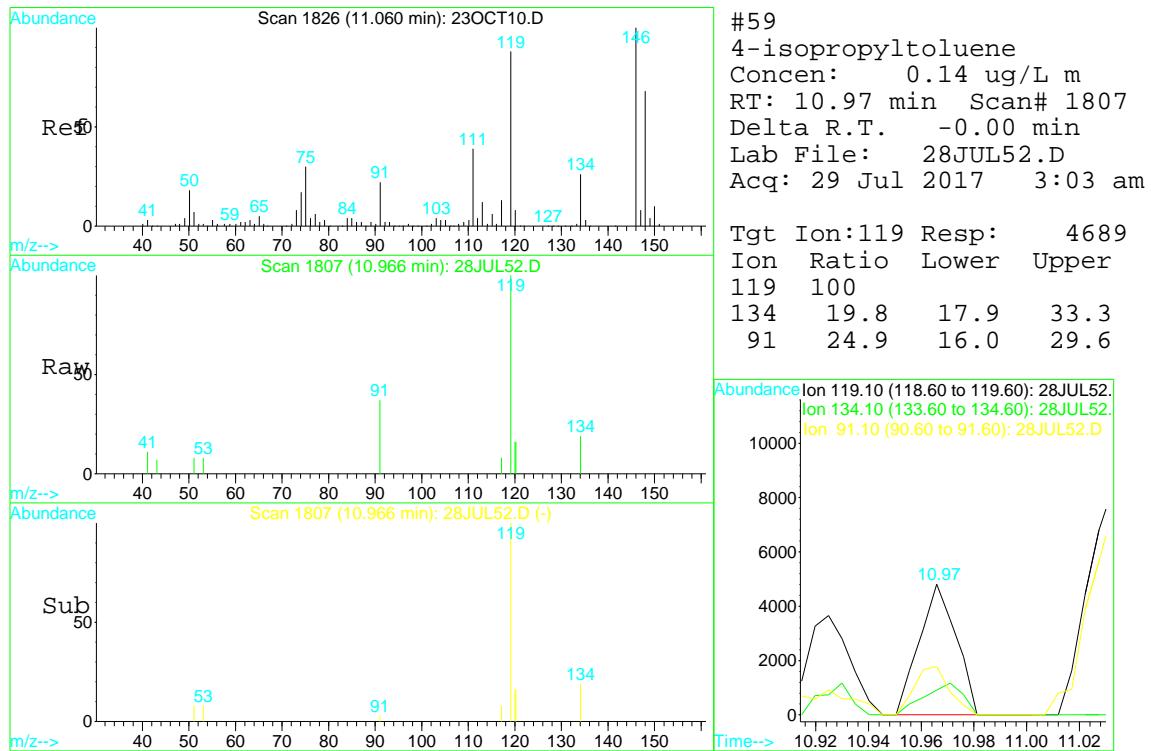
Tgt Ion:105 Resp: 77355
 Ion Ratio Lower Upper
 105 100
 120 49.8 31.8 59.0

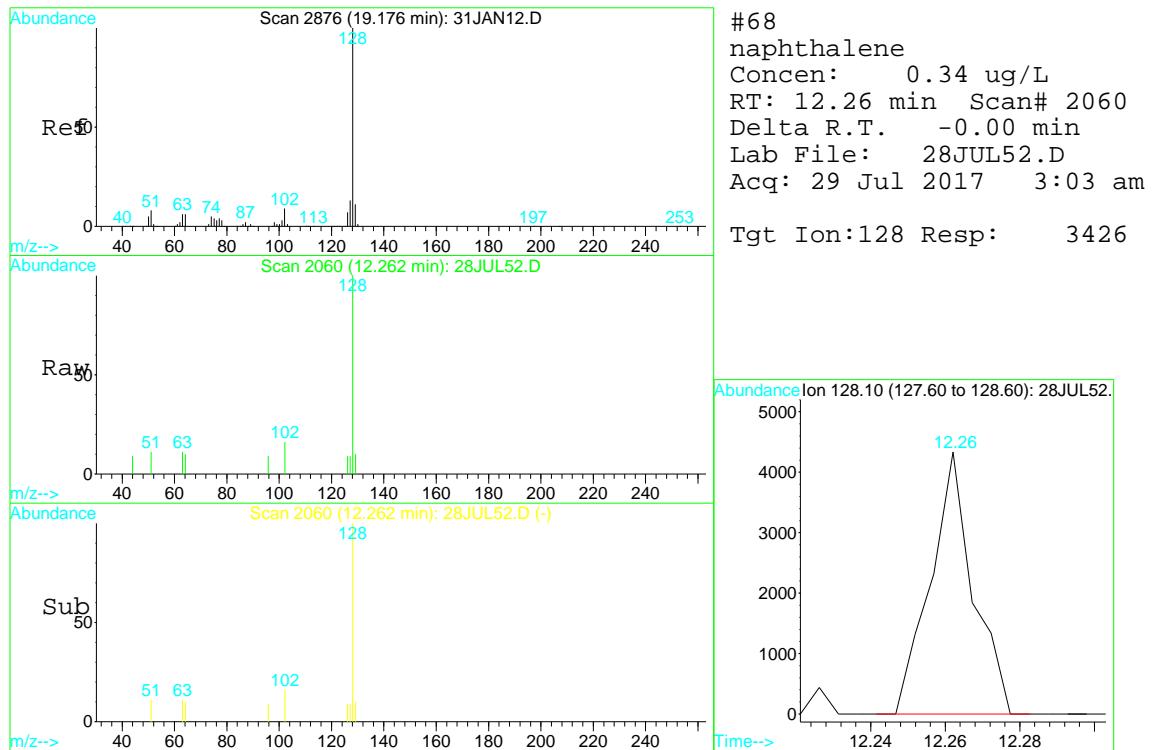
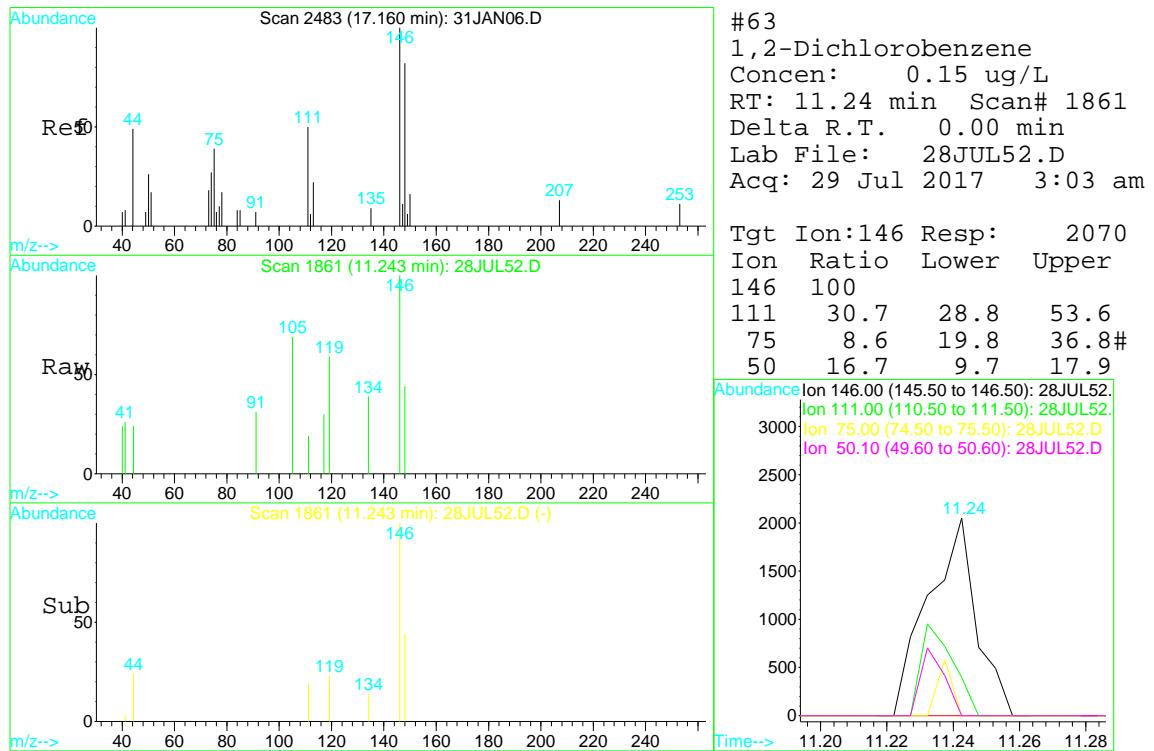


#58
 sec-butylbenzene
 Concen: 0.16 ug/L
 RT: 10.89 min Scan# 1792
 Delta R.T. 0.00 min
 Lab File: 28JUL52.D
 Acq: 29 Jul 2017 3:03 am

Tgt Ion:105 Resp: 6608
 Ion Ratio Lower Upper
 105 100
 134 35.2 14.4 26.7#







Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL52.D Vial: 52
Acq On : 29 Jul 2017 3:03 am Operator: MGC
Sample : 1720267-02 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 29 9:28 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)

Title : EPA Method 624/8260

Last Update : Fri Jul 21 04:19:15 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----	-----	-----	-----	-----	-----	-----
1) Pentafluorobenzene IS#1	6.58	168	152256	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	220797	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	64061	10.00	ug/L	0.00

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)	Qvalue
4) 1,2-dichlorotrifluoroethan	3.29	67	66580	6.64	ug/L	#	77

(#) = qualifier out of range (m) = manual integration

28JUL52.D 82605X.M Sat Jul 29 09:28:11 2017

Page 1

BC Laboratories, Inc, Page 337 of 925

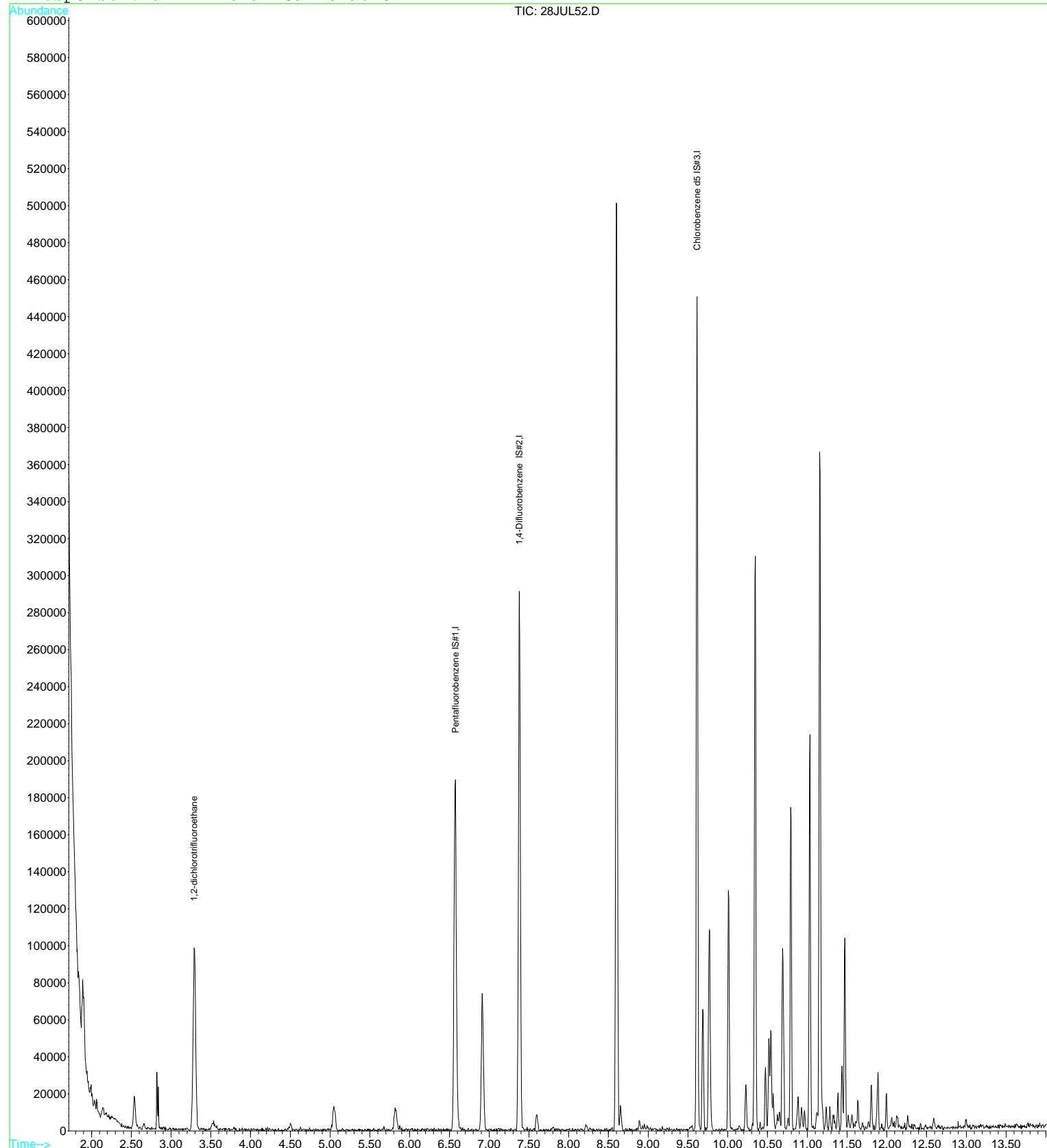
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL52.D
Acq On : 29 Jul 2017 3:03 am
Sample : 1720267-02
Misc : 1 ;25ML;pH=1
MS Integration Params: rteint.p
Quant Time: Jul 29 9:28 2017

Vial: 52
Operator: MGC
Inst : MS-V5
Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



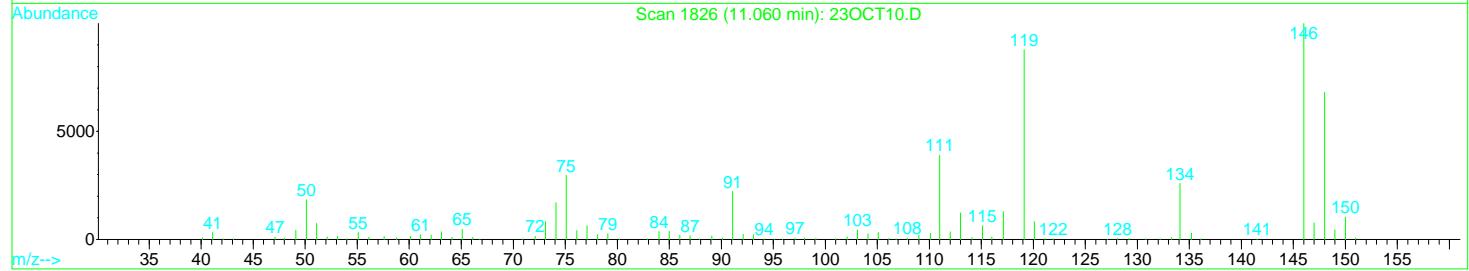
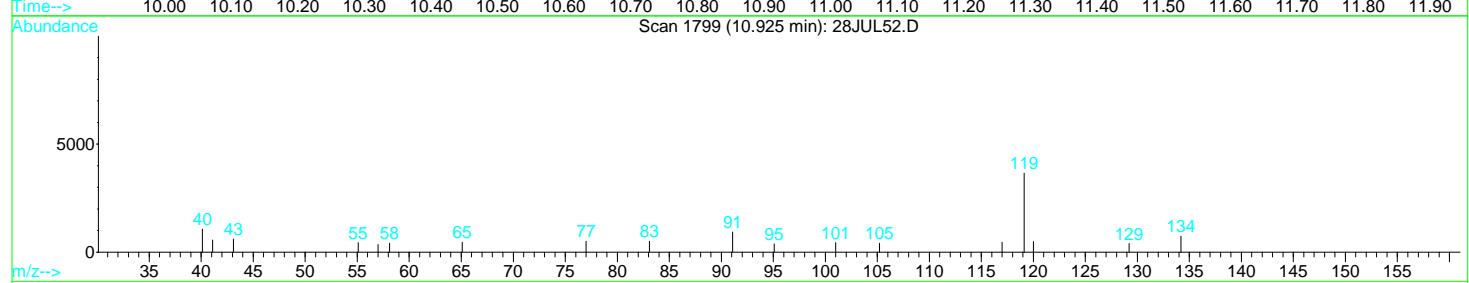
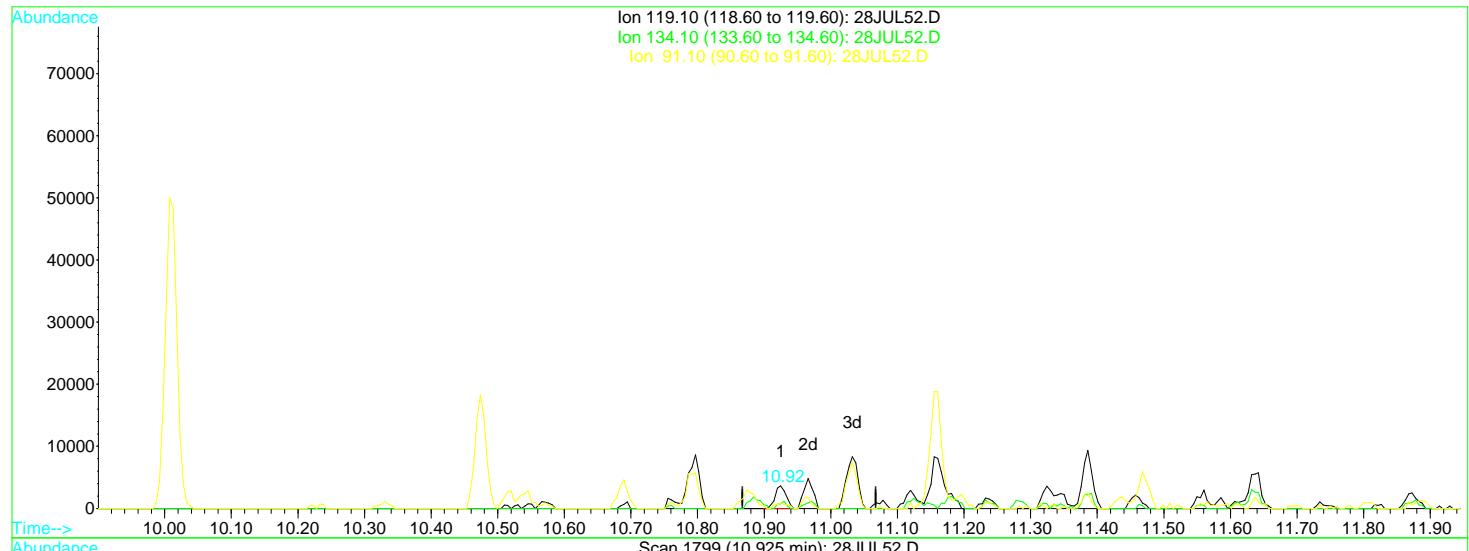
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL52.D
 Acq On : 29 Jul 2017 3:03 am
 Sample : 1720267-02
 Misc : 1 ;25ML;pH=1
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:19 2017

Vial: 52
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Multiple Level Calibration



TIC: 28JUL52.D

(59) 4-isopropyltoluene

10.92min 0.13ug/L

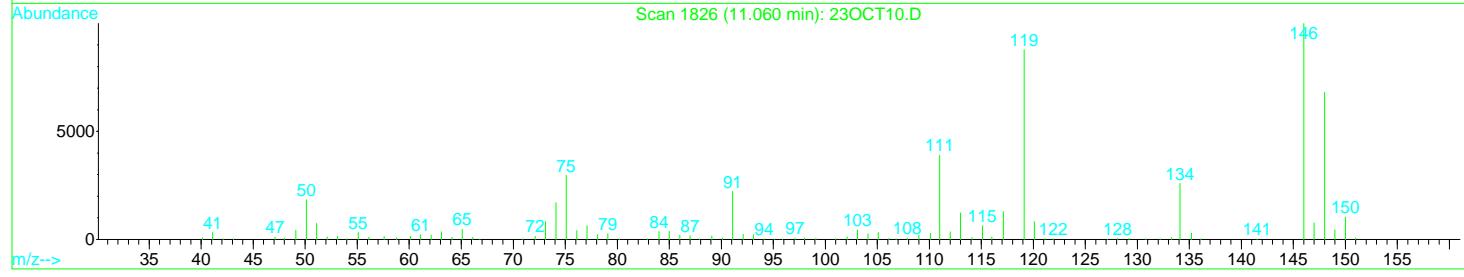
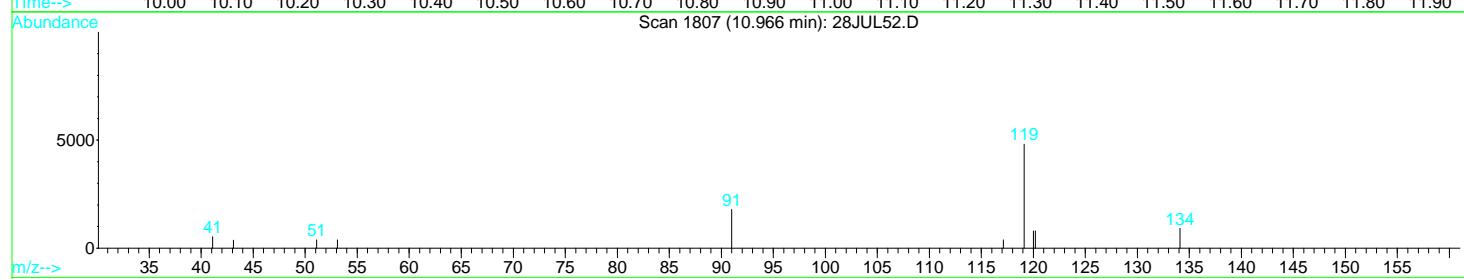
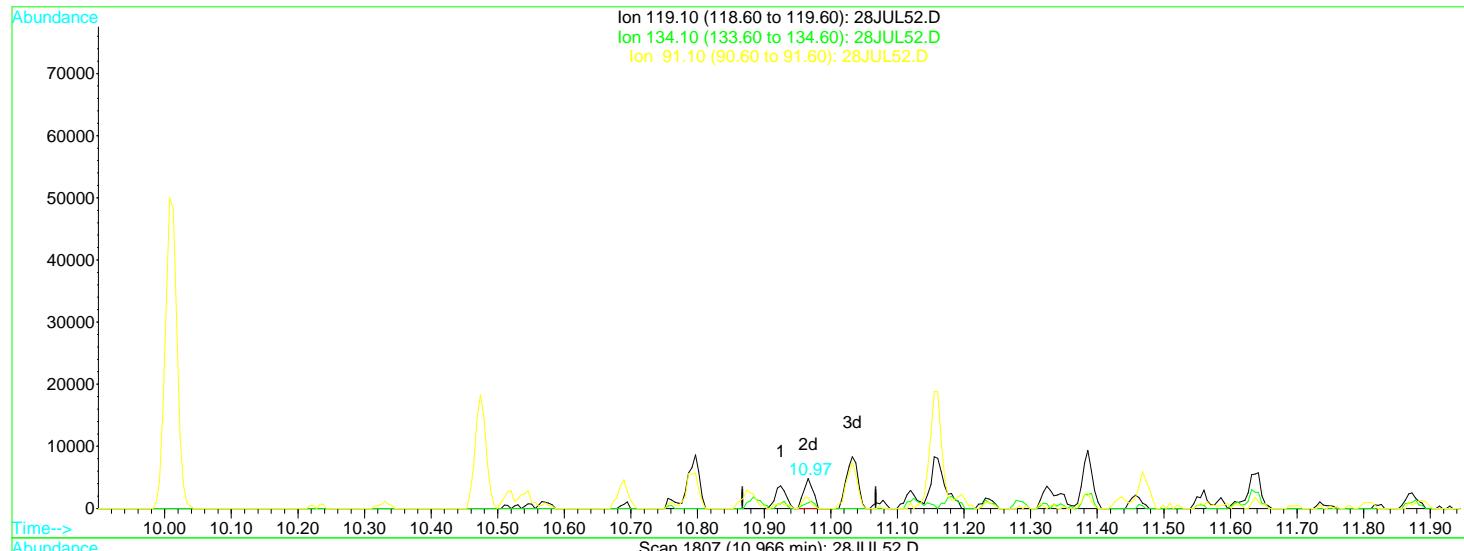
response 4171

Ion	Exp%	Act%
119.10	100	100
134.10	25.60	22.22
91.10	22.80	27.95
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL52.D Vial: 52
 Acq On : 29 Jul 2017 3:03 am Operator: MGC
 Sample : 1720267-02 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:20 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Multiple Level Calibration



TIC: 28JUL52.D

(59) 4-isopropyltoluene

10.97min 0.14ug/L m

response 4689

Ion	Exp%	Act%
119.10	100	100
134.10	25.60	19.77
91.10	22.80	24.87
0.00	0.00	0.00

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL53.D Vial: 53
 Acq On : 29 Jul 2017 3:26 am Operator: MGC
 Sample : 1720267-03 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00

MS Integration Params: rteint.p
 Quant Time: Jul 29 9:21 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	159704	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	237414	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	65025	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	50691	10.87	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	108.70%
31) Toluene d8 SMC#2	8.60	98	289345	9.87	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.70%
49) Bromofluorobenzene SMC#3	10.35	95	98888	10.18	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	101.80%

Target Compounds

					Qvalue
4) Vinyl chloride	2.07	62	62870	5.25	ug/L
12) T-1,2-dichloroethene	4.50	96	41109	5.14	ug/L
15) Cis-1,2-dichloroethene	5.83	96	30340	3.64	ug/L
22) 1,2-Dichloroethane	7.01	62	1507	0.23	ug/L #
23) Benzene	6.93	78	66614	2.04	ug/L #
32) Toluene	8.66	92	4191	0.20	ug/L #
36) 1,3-Dichloropropane	9.07	76	1165	0.19	ug/L
42) Ethylbenzene	9.69	106	5116	0.40	ug/L
43) P+m-Xylene	9.77	106	15564	1.00	ug/L
44) O-Xylene	10.01	106	27790	1.94	ug/L #
47) Isopropylbenzene	10.23	105	27707	0.75	ug/L
57) 1,2,4-trimethylbenzene	10.79	105	1534	0.05	ug/L
59) 4-isopropyltoluene	10.97	119	3278	0.10	ug/L

(#) = qualifier out of range (m) = manual integration

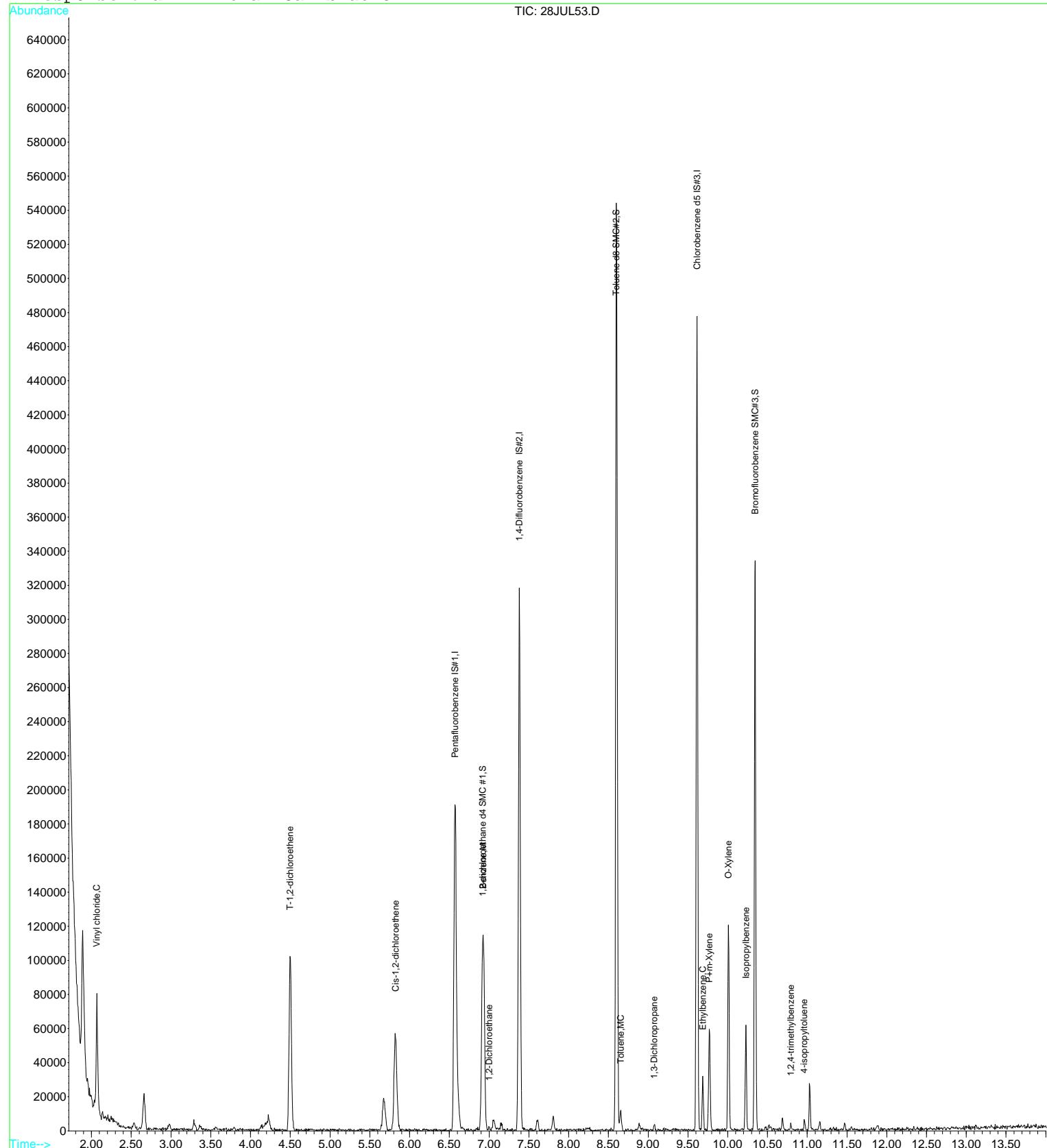
28JUL53.D 82605.M Sat Jul 29 09:26:09 2017

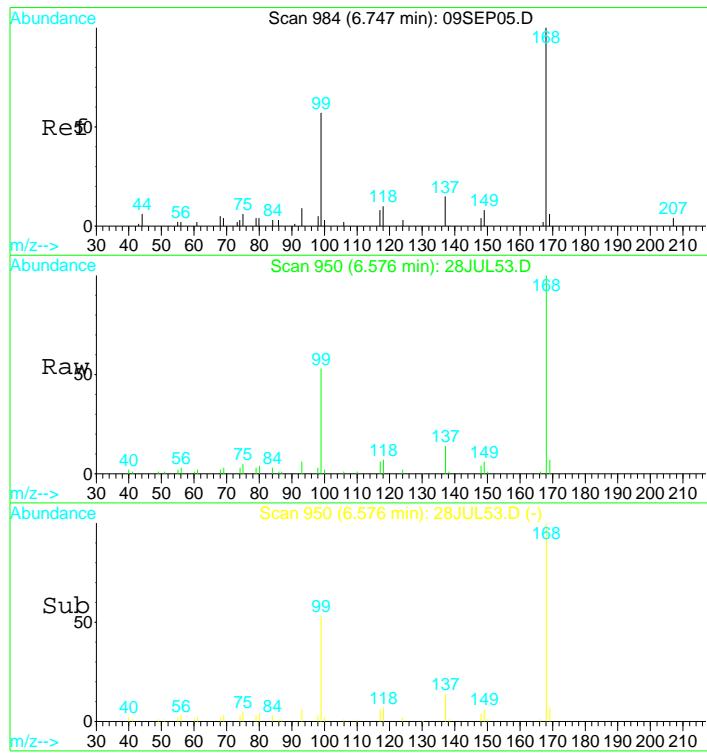
Page 1

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL53.D Vial: 53
 Acq On : 29 Jul 2017 3:26 am Operator: MGC
 Sample : 1720267-03 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:21 2017 Quant Results File: 82605.RES

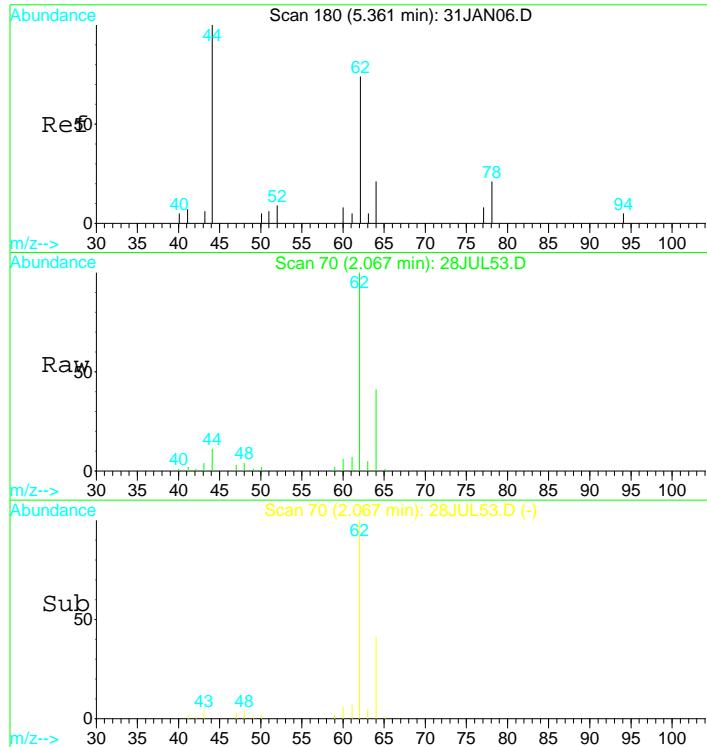
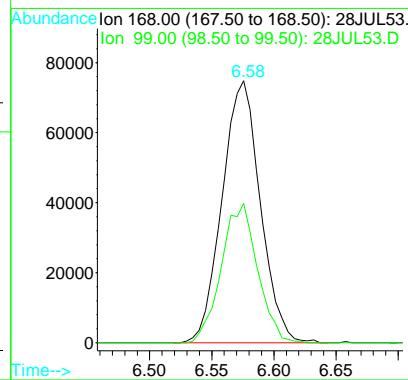
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration





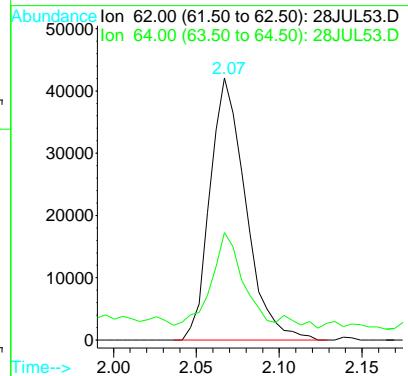
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.58 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 28JUL53.D
 Acq: 29 Jul 2017 3:26 am

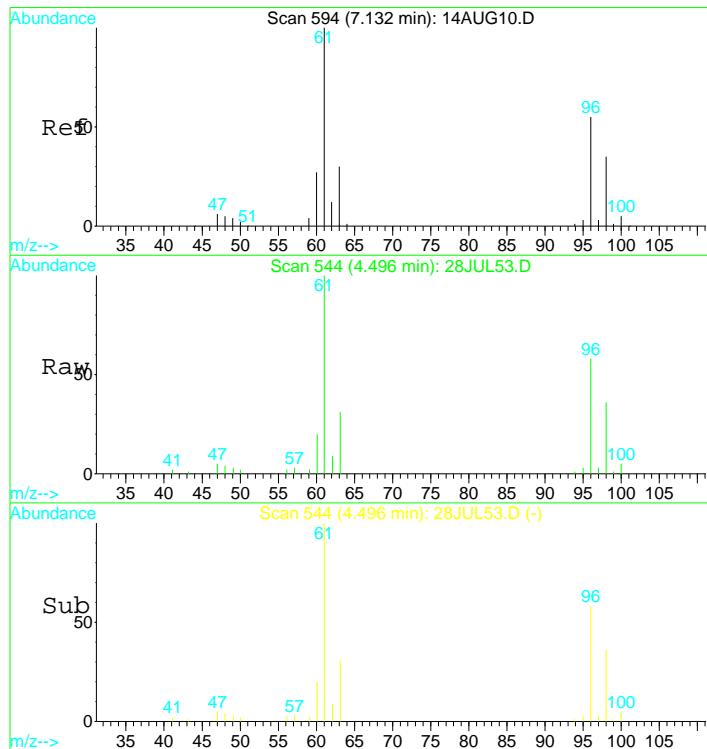
Tgt Ion: 168 Resp: 159704
 Ion Ratio Lower Upper
 168 100
 99 50.3 38.7 71.9



#4
 Vinyl chloride
 Concen: 5.25 ug/L
 RT: 2.07 min Scan# 70
 Delta R.T. -0.01 min
 Lab File: 28JUL53.D
 Acq: 29 Jul 2017 3:26 am

Tgt Ion: 62 Resp: 62870
 Ion Ratio Lower Upper
 62 100
 64 47.7 39.3 72.9

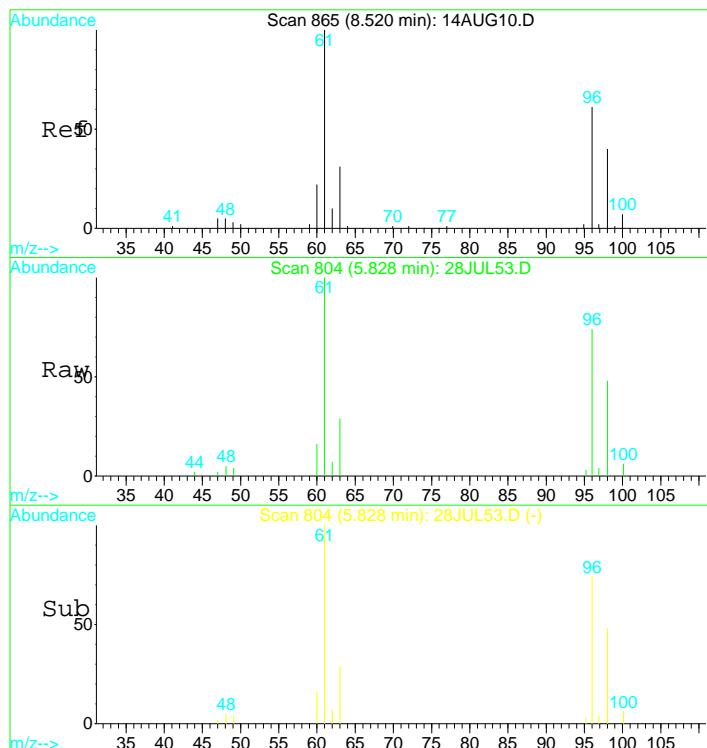
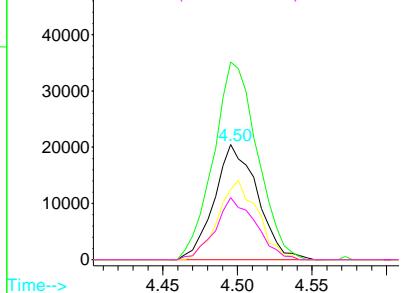




#12
 T-1,2-dichloroethene
 Concen: 5.14 ug/L
 RT: 4.50 min Scan# 544
 Delta R.T. -0.01 min
 Lab File: 28JUL53.D
 Acq: 29 Jul 2017 3:26 am

Tgt Ion: 96 Resp: 41109
 Ion Ratio Lower Upper
 96 100
 61 174.5 129.4 240.4
 98 63.7 41.5 77.1
 63 50.7 39.3 73.1

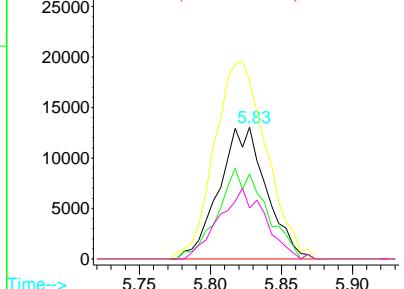
Abundance
 Ion 96.00 (95.50 to 96.50): 28JUL53.D
 Ion 61.00 (60.50 to 61.50): 28JUL53.D
 Ion 98.00 (97.50 to 98.50): 28JUL53.D
 Ion 63.00 (62.50 to 63.50): 28JUL53.D

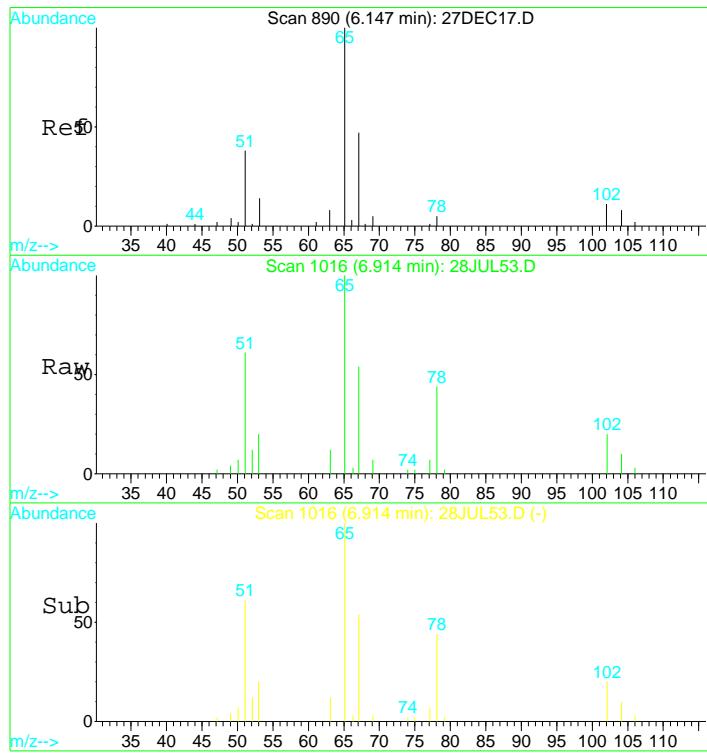


#15
 Cis-1,2-dichloroethene
 Concen: 3.64 ug/L
 RT: 5.83 min Scan# 804
 Delta R.T. 0.00 min
 Lab File: 28JUL53.D
 Acq: 29 Jul 2017 3:26 am

Tgt Ion: 96 Resp: 30340
 Ion Ratio Lower Upper
 96 100
 98 69.2 51.9 96.3
 61 164.1 122.8 228.0
 63 52.0 42.1 78.3

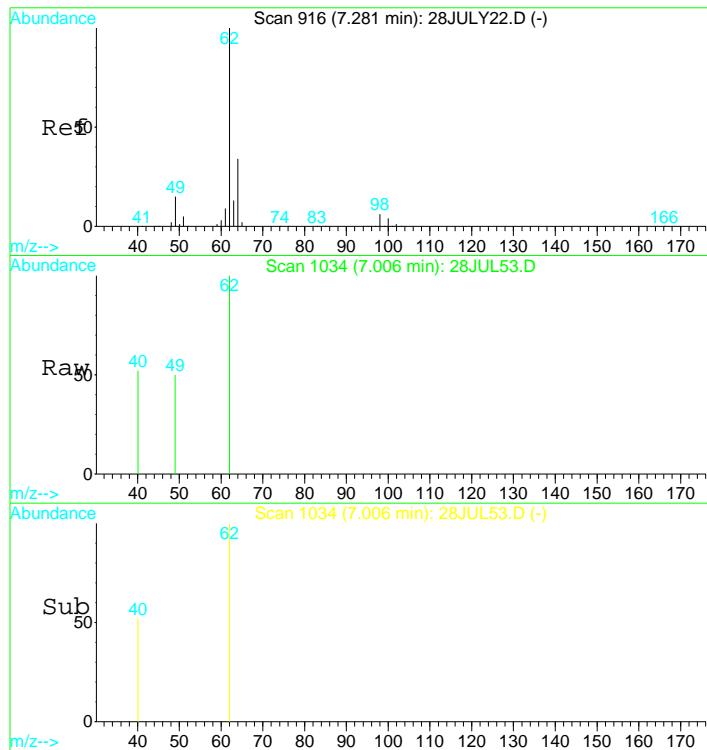
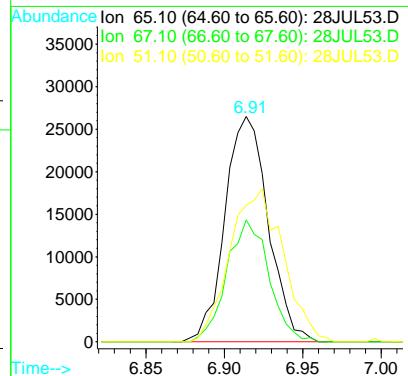
Abundance
 Ion 96.00 (95.50 to 96.50): 28JUL53.D
 Ion 98.00 (97.50 to 98.50): 28JUL53.D
 Ion 61.00 (60.50 to 61.50): 28JUL53.D
 Ion 63.00 (62.50 to 63.50): 28JUL53.D





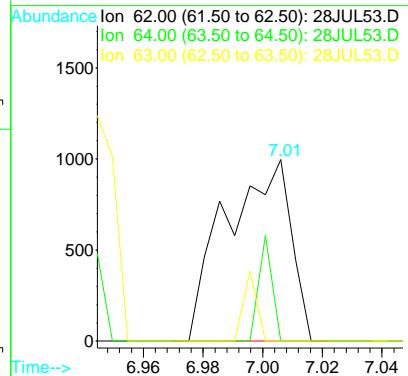
#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.91 min Scan# 1016
 Delta R.T. -0.00 min
 Lab File: 28JUL53.D
 Acq: 29 Jul 2017 3:26 am

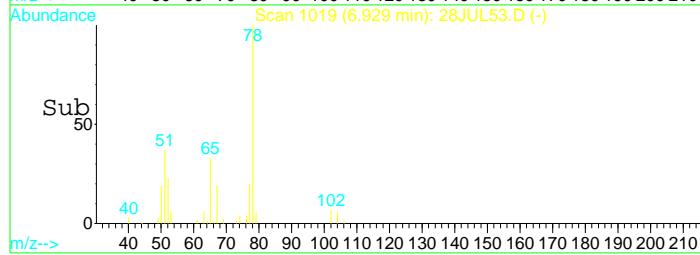
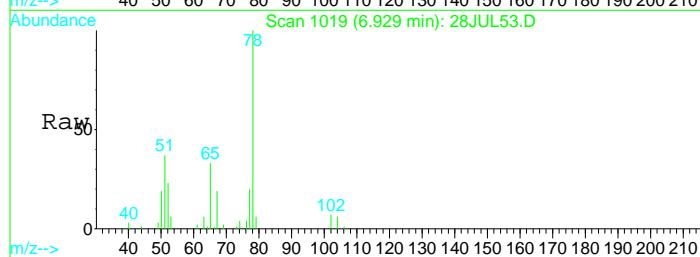
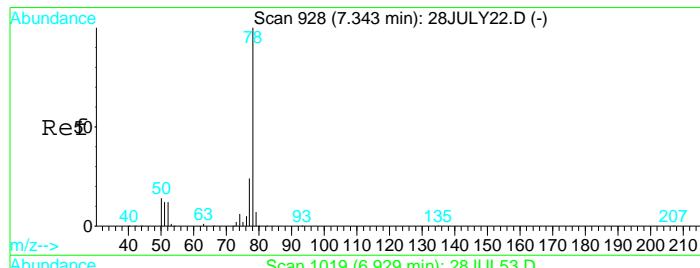
Tgt Ion: 65 Resp: 50691
 Ion Ratio Lower Upper
 65 100
 67 52.6 36.2 67.2
 51 83.3 42.0 78.0#



#22
 1,2-Dichloroethane
 Concen: 0.23 ug/L
 RT: 7.01 min Scan# 1034
 Delta R.T. 0.00 min
 Lab File: 28JUL53.D
 Acq: 29 Jul 2017 3:26 am

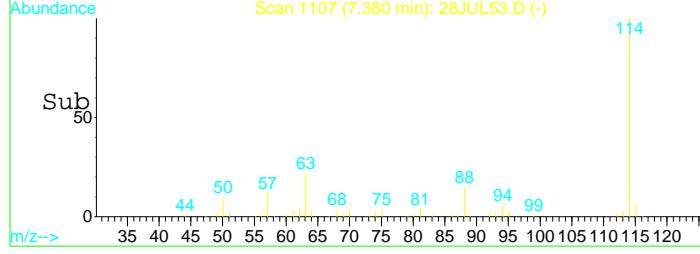
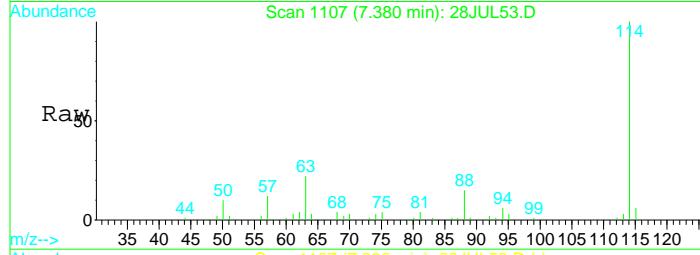
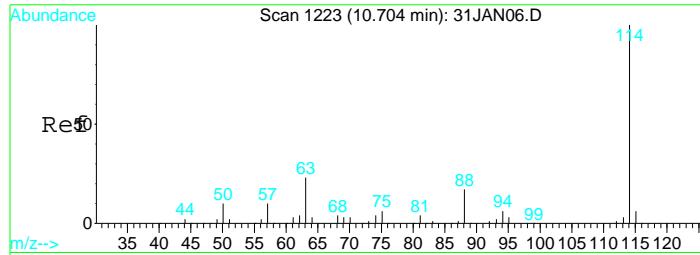
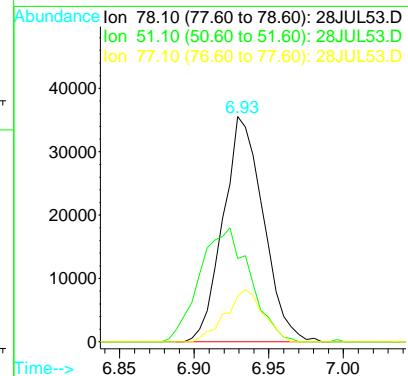
Tgt Ion: 62 Resp: 1507
 Ion Ratio Lower Upper
 62 100
 64 11.8 18.8 35.0#
 63 7.9 5.8 10.8





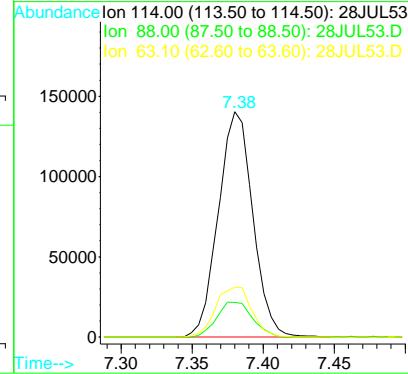
#23
 Benzene
 Concen: 2.04 ug/L
 RT: 6.93 min Scan# 1019
 Delta R.T. -0.01 min
 Lab File: 28JUL53.D
 Acq: 29 Jul 2017 3:26 am

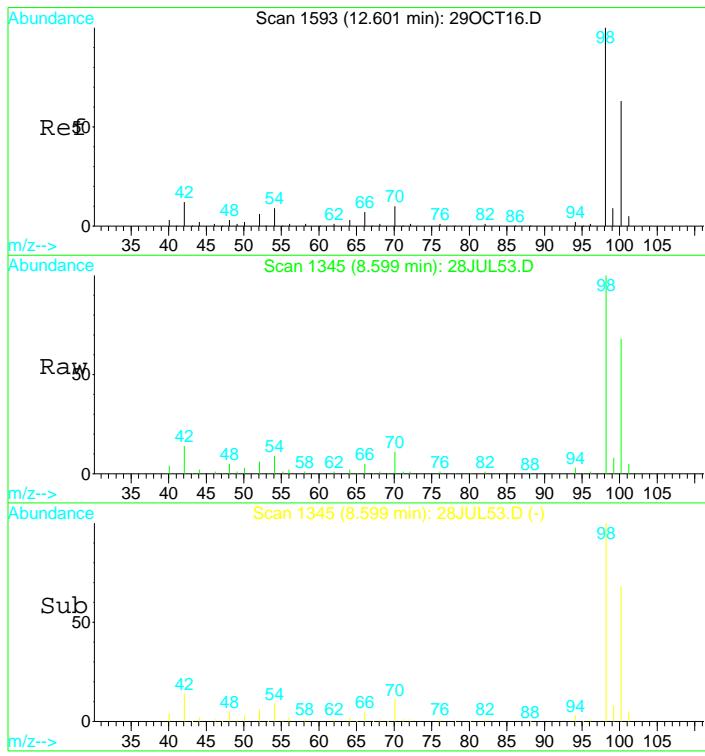
Tgt Ion: 78 Resp: 66614
 Ion Ratio Lower Upper
 78 100
 51 63.4 114.8 213.2#
 77 21.8 15.2 28.2



#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1107
 Delta R.T. -0.00 min
 Lab File: 28JUL53.D
 Acq: 29 Jul 2017 3:26 am

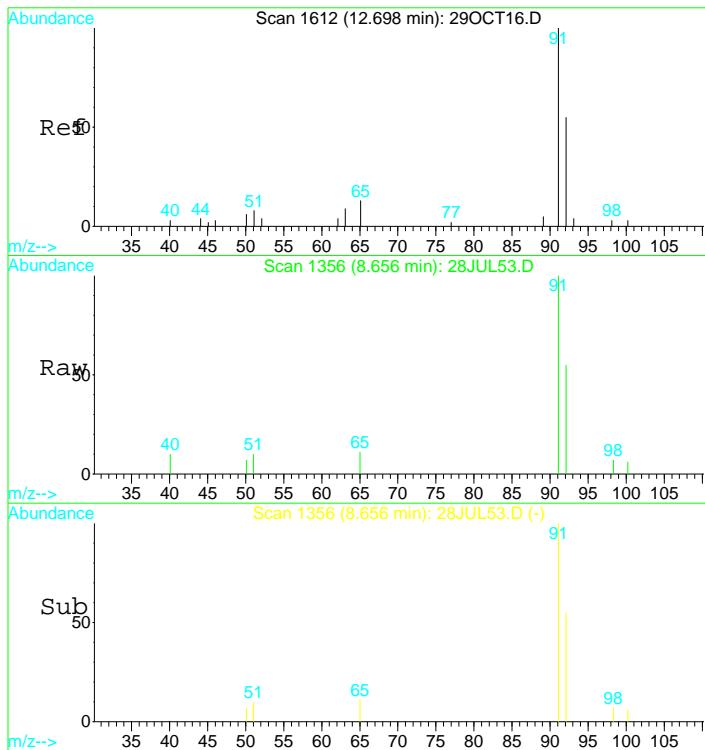
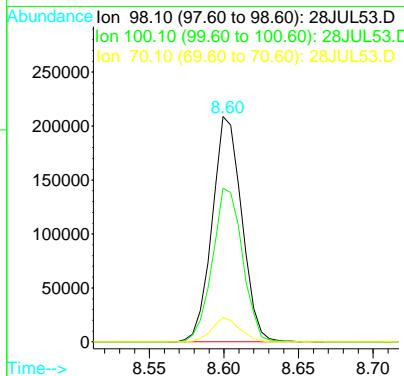
Tgt Ion: 114 Resp: 237414
 Ion Ratio Lower Upper
 114 100
 88 16.1 11.7 21.7
 63 23.3 16.7 30.9





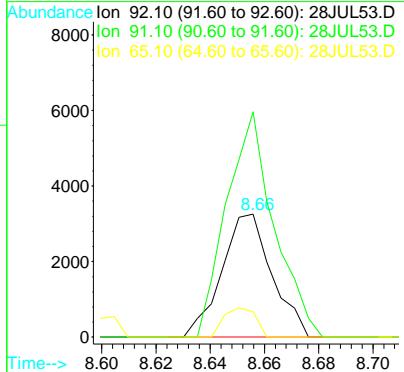
#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1345
 Delta R.T. -0.00 min
 Lab File: 28JUL53.D
 Acq: 29 Jul 2017 3:26 am

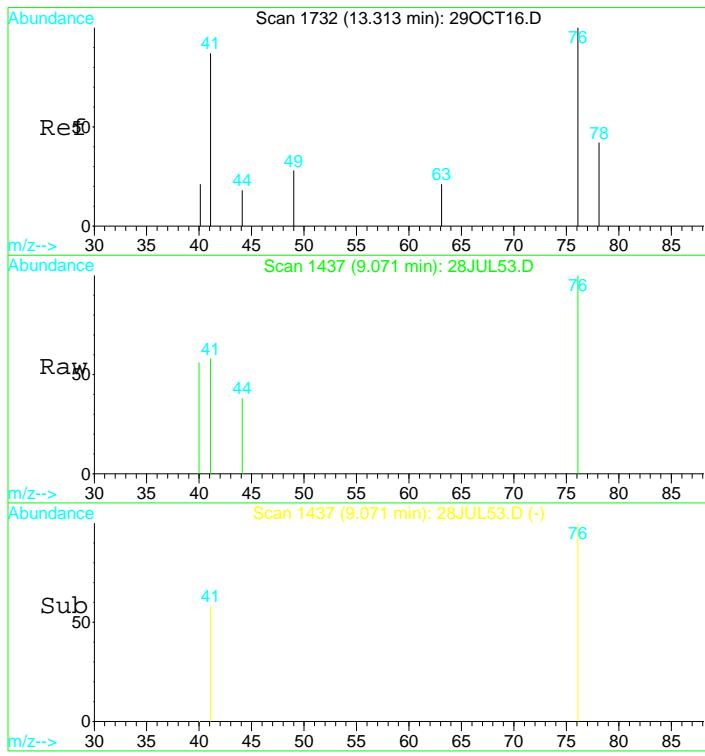
Tgt Ion: 98 Resp: 289345
 Ion Ratio Lower Upper
 98 100
 100 69.3 49.7 92.3
 70 10.1 7.3 13.7



#32
 Toluene
 Concen: 0.20 ug/L
 RT: 8.66 min Scan# 1356
 Delta R.T. 0.00 min
 Lab File: 28JUL53.D
 Acq: 29 Jul 2017 3:26 am

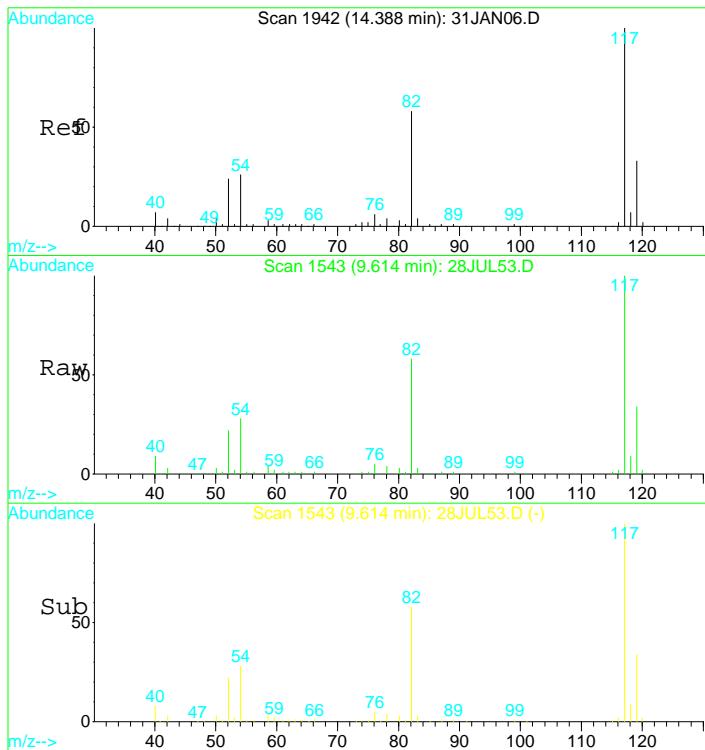
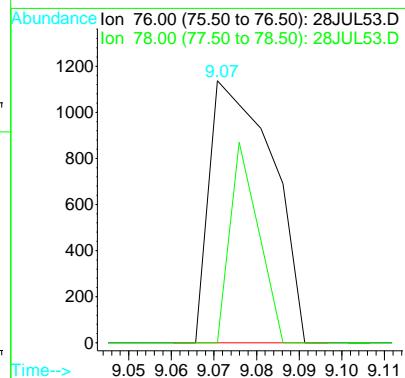
Tgt Ion: 92 Resp: 4191
 Ion Ratio Lower Upper
 92 100
 91 173.0 122.6 227.6
 65 15.1 16.5 30.7#





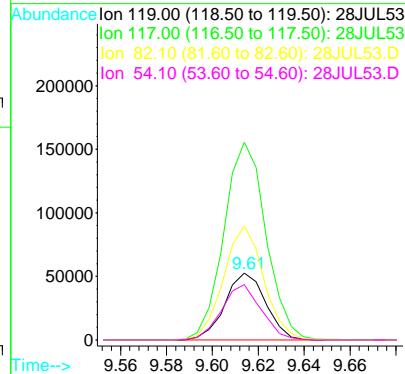
#36
1, 3-Dichloropropane
Concen: 0.19 ug/L
RT: 9.07 min Scan# 1437
Delta R.T. -0.01 min
Lab File: 28JUL53.D
Acq: 29 Jul 2017 3:26 am

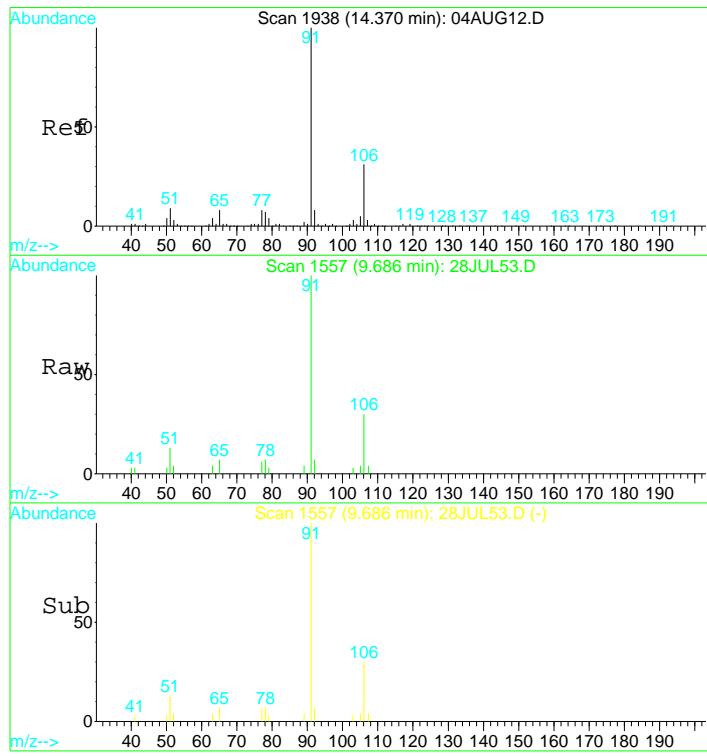
Tgt Ion: 76 Resp: 1165
Ion Ratio Lower Upper
76 100
78 34.8 25.5 47.3



#39
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.61 min Scan# 1543
Delta R.T. -0.00 min
Lab File: 28JUL53.D
Acq: 29 Jul 2017 3:26 am

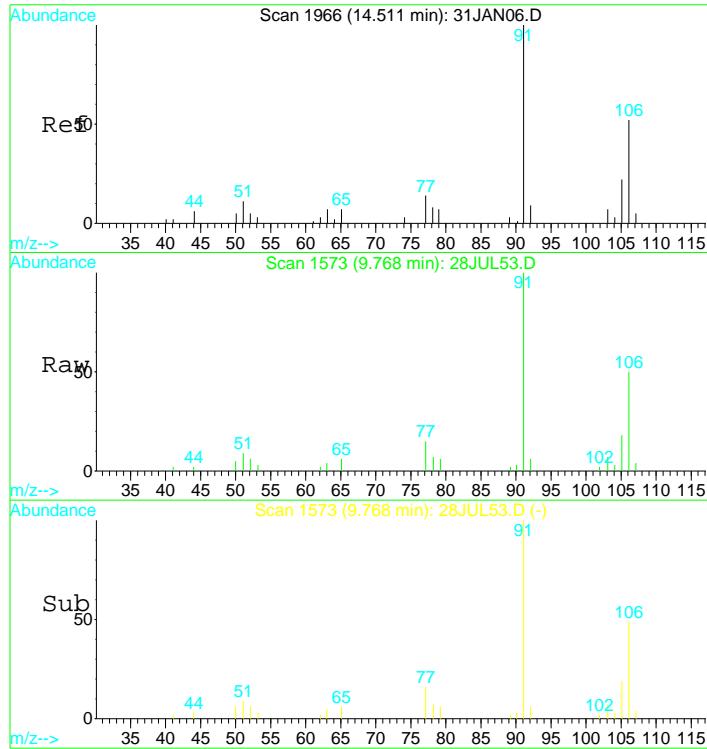
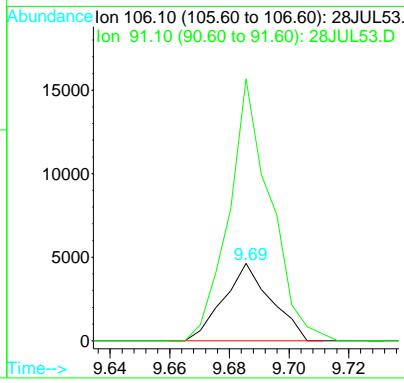
Tgt Ion: 119 Resp: 65025
Ion Ratio Lower Upper
119 100
117 304.3 214.5 398.4
82 167.7 117.7 218.7
54 80.5 55.2 102.4





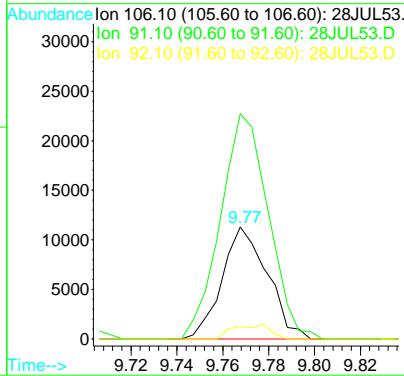
#42
Ethylbenzene
Concen: 0.40 ug/L
RT: 9.69 min Scan# 1557
Delta R.T. -0.00 min
Lab File: 28JUL53.D
Acq: 29 Jul 2017 3:26 am

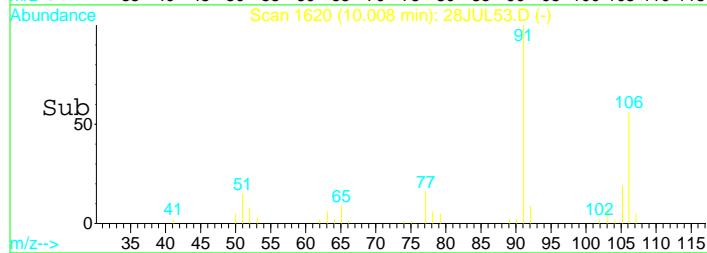
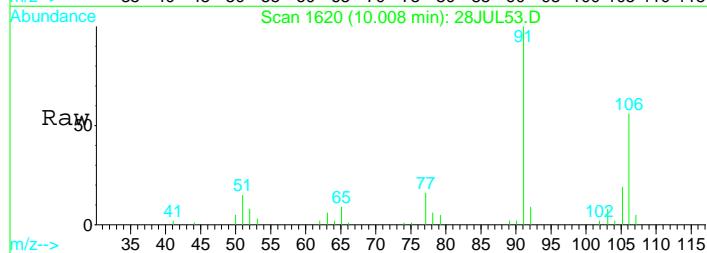
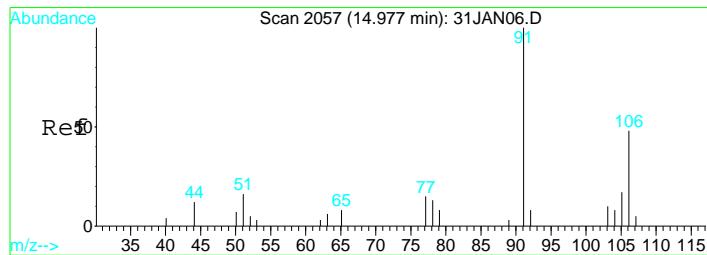
Tgt Ion: 106 Resp: 5116
Ion Ratio Lower Upper
106 100
91 297.1 241.5 448.5



#43
P+m-Xylene
Concen: 1.00 ug/L
RT: 9.77 min Scan# 1573
Delta R.T. -0.00 min
Lab File: 28JUL53.D
Acq: 29 Jul 2017 3:26 am

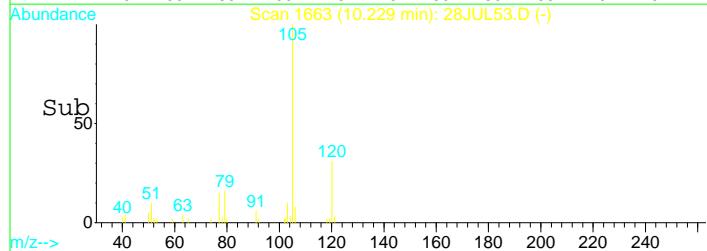
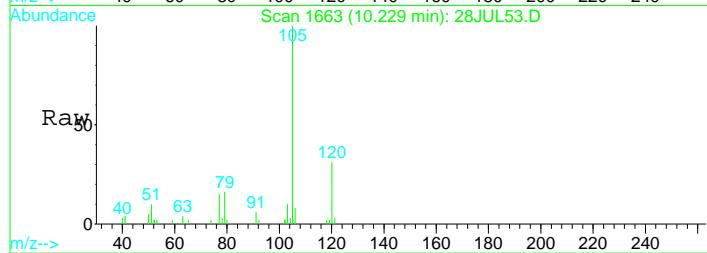
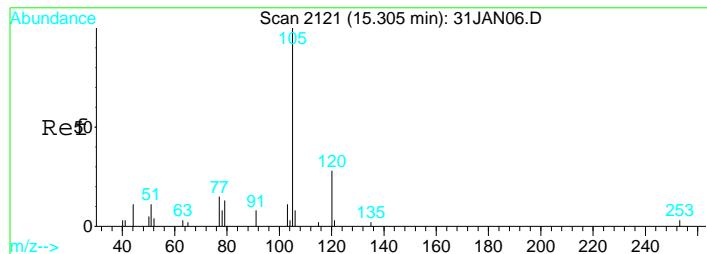
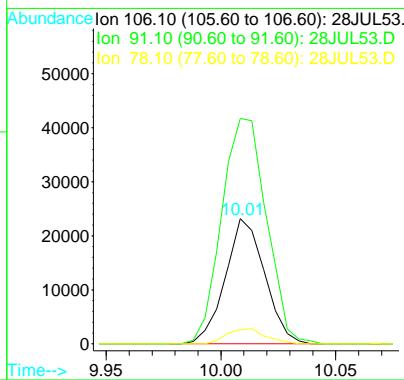
Tgt Ion: 106 Resp: 15564
Ion Ratio Lower Upper
106 100
91 211.5 135.0 250.6
92 10.7 10.3 19.1





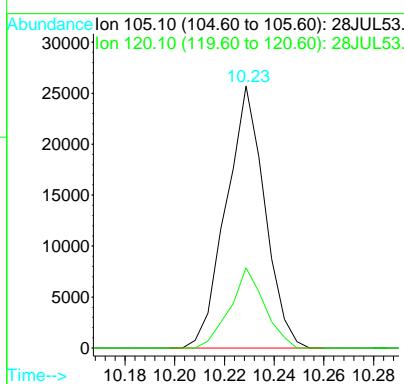
#44
O-Xylene
Concen: 1.94 ug/L
RT: 10.01 min Scan# 1620
Delta R.T. -0.00 min
Lab File: 28JUL53.D
Acq: 29 Jul 2017 3:26 am

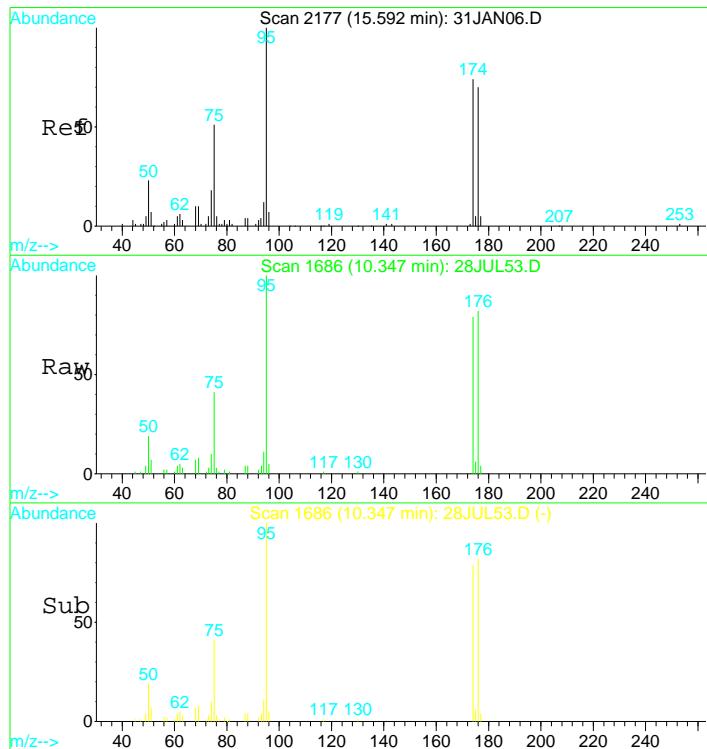
Tgt Ion: 106 Resp: 27790
Ion Ratio Lower Upper
106 100
91 203.7 154.3 286.5
78 11.9 47.1 87.5#



#47
Isopropylbenzene
Concen: 0.75 ug/L
RT: 10.23 min Scan# 1663
Delta R.T. -0.00 min
Lab File: 28JUL53.D
Acq: 29 Jul 2017 3:26 am

Tgt Ion: 105 Resp: 27707
Ion Ratio Lower Upper
105 100
120 27.3 19.2 35.6

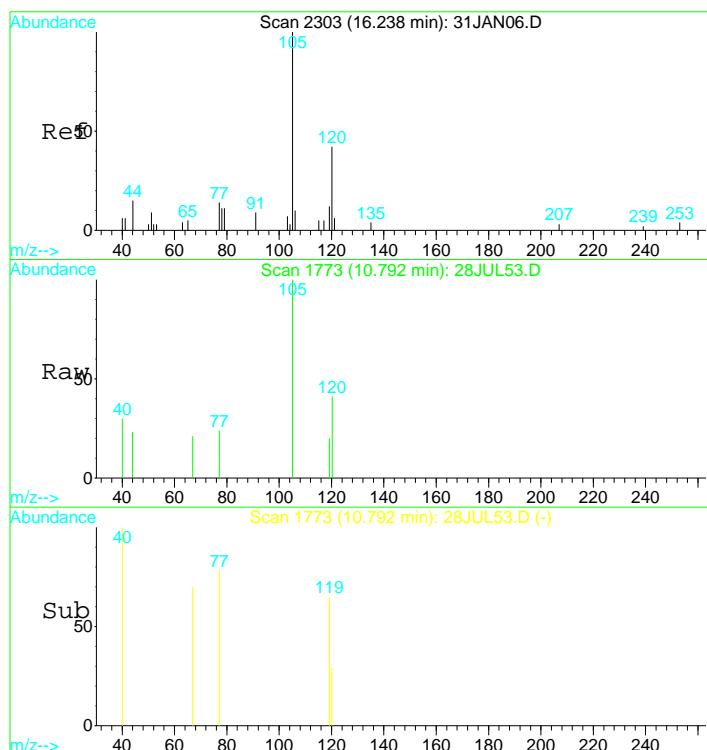
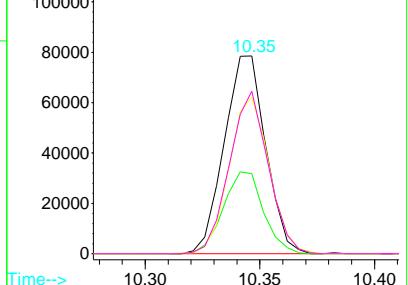




#49
 Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.35 min Scan# 1686
 Delta R.T. 0.00 min
 Lab File: 28JUL53.D
 Acq: 29 Jul 2017 3:26 am

Tgt Ion: 95 Resp: 98888
 Ion Ratio Lower Upper
 95 100
 75 40.1 29.5 54.7
 174 76.4 52.3 97.1
 176 76.5 49.6 92.2

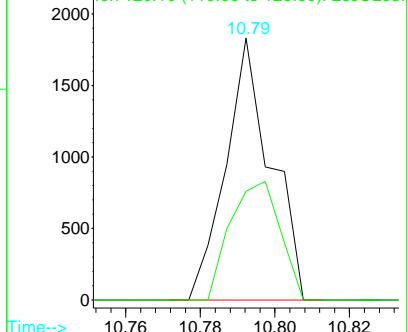
Abundance Ion 95.00 (94.50 to 95.50): 28JUL53.D
 120000 Ion 75.00 (74.50 to 75.50): 28JUL53.D
 Ion 173.90 (173.40 to 174.40): 28JUL53.D
 Ion 175.90 (175.40 to 176.40): 28JUL53.D

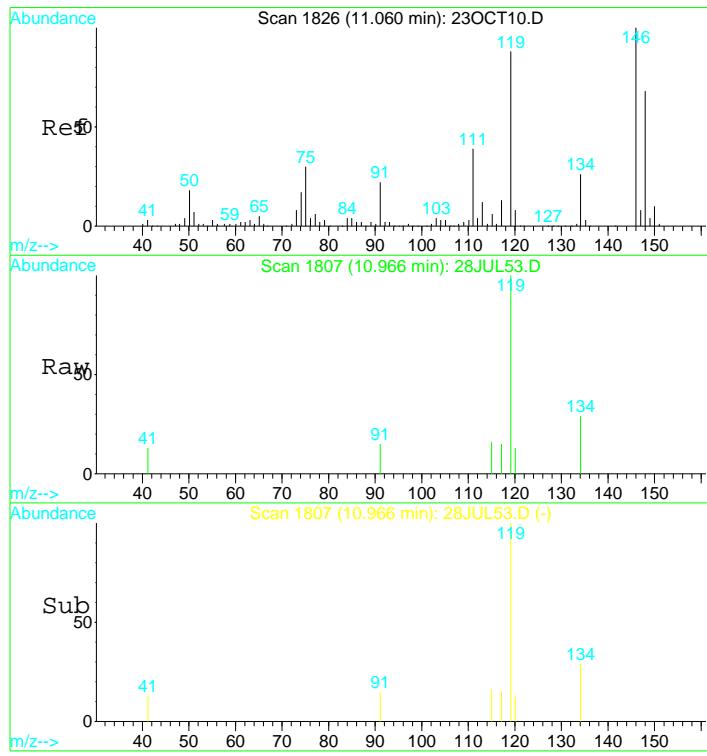


#57
 1,2,4-trimethylbenzene
 Concen: 0.05 ug/L
 RT: 10.79 min Scan# 1773
 Delta R.T. -0.00 min
 Lab File: 28JUL53.D
 Acq: 29 Jul 2017 3:26 am

Tgt Ion: 105 Resp: 1534
 Ion Ratio Lower Upper
 105 100
 120 49.9 31.8 59.0

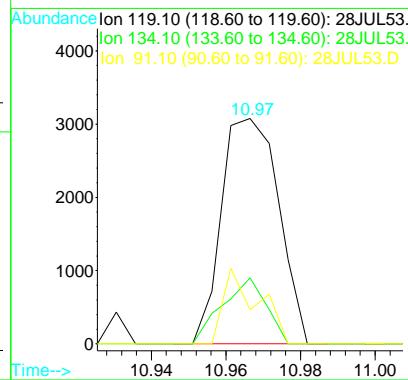
Abundance Ion 105.10 (104.60 to 105.60): 28JUL53.D
 Ion 120.10 (119.60 to 120.60): 28JUL53.D





#59
 4-isopropyltoluene
 Concen: 0.10 ug/L
 RT: 10.97 min Scan# 1807
 Delta R.T. -0.00 min
 Lab File: 28JUL53.D
 Acq: 29 Jul 2017 3:26 am

Tgt Ion: 119 Resp: 3278
 Ion Ratio Lower Upper
 119 100
 134 22.5 17.9 33.3
 91 20.4 16.0 29.6



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL53.D Vial: 53
Acq On : 29 Jul 2017 3:26 am Operator: MGC
Sample : 1720267-03 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 29 9:28 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)

Title : EPA Method 624/8260

Last Update : Fri Jul 21 04:19:15 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	159704	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	237414	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	65025	10.00	ug/L	0.00

Target Compounds					Qvalue
4) 1,2-dichlorotrifluoroethan	3.29	67	2788	0.26	ug/L # 57
27) Cyclohexane	6.62	56	15774	0.75	ug/L # 92
31) Methylcyclohexane	7.81	55	3567	0.25	ug/L 89

(#= qualifier out of range (m)= manual integration

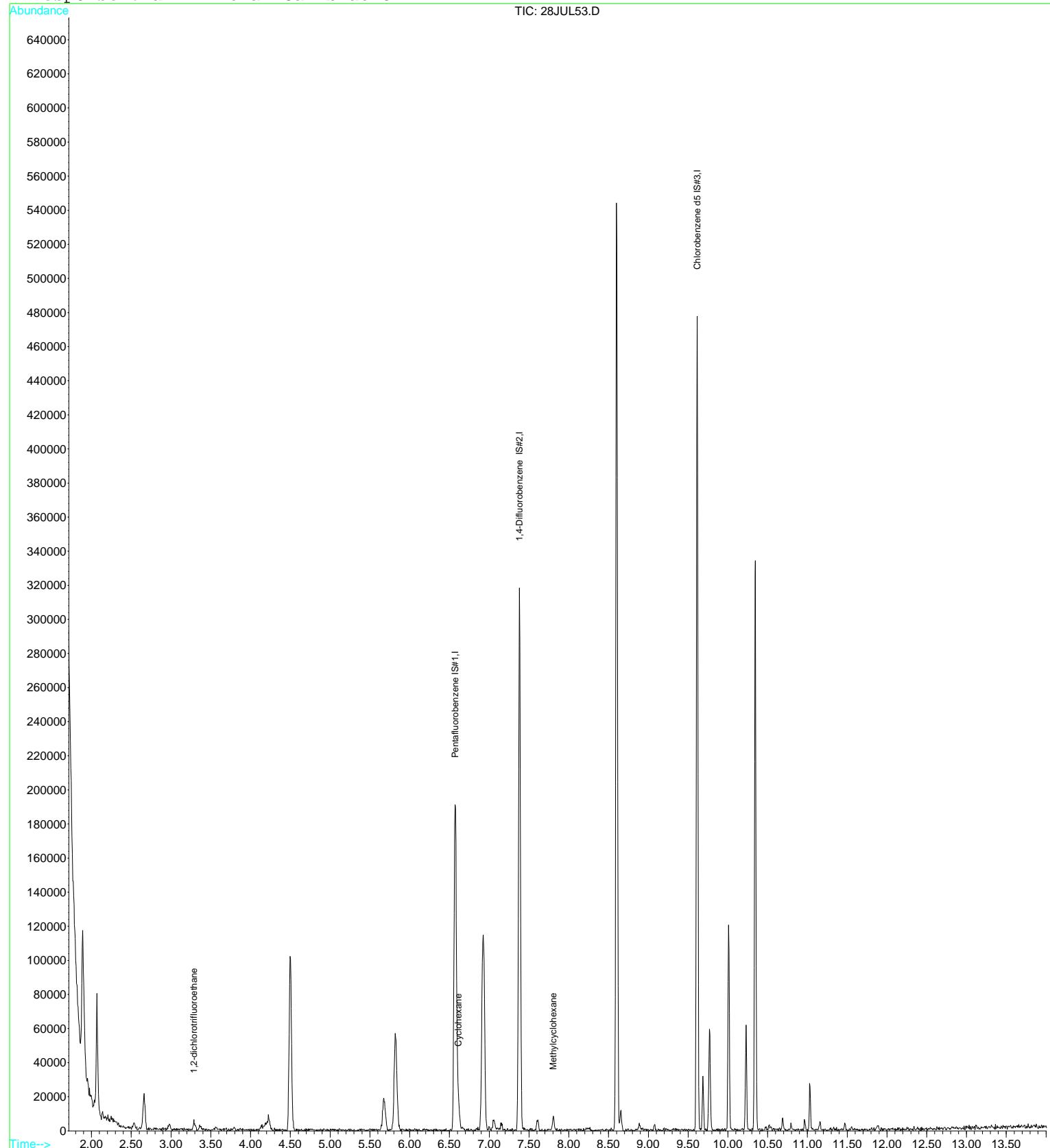
28JUL53.D 82605X.M Sat Jul 29 09:28:50 2017

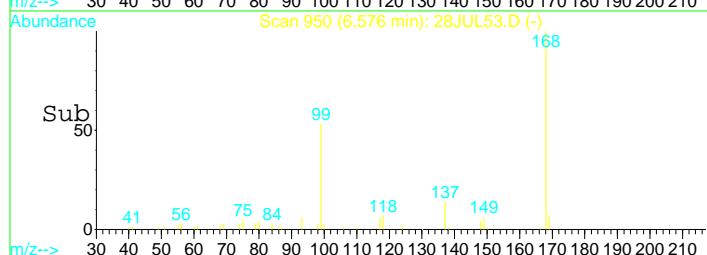
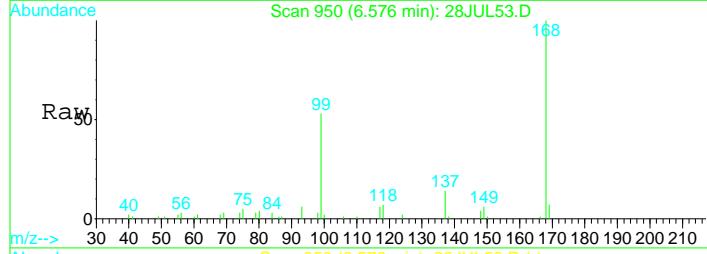
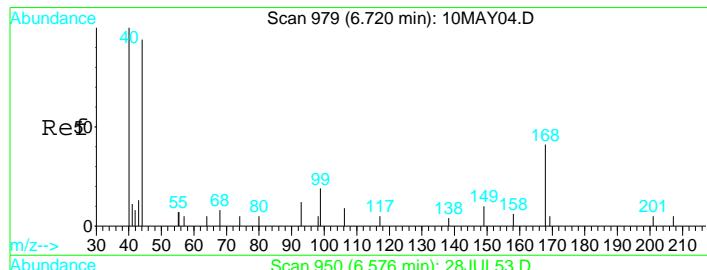
Page 1

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL53.D Vial: 53
Acq On : 29 Jul 2017 3:26 am Operator: MGC
Sample : 1720267-03 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:28 2017 Quant Results File: 82605X.RES

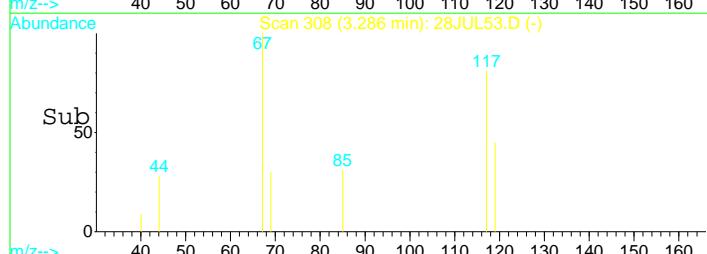
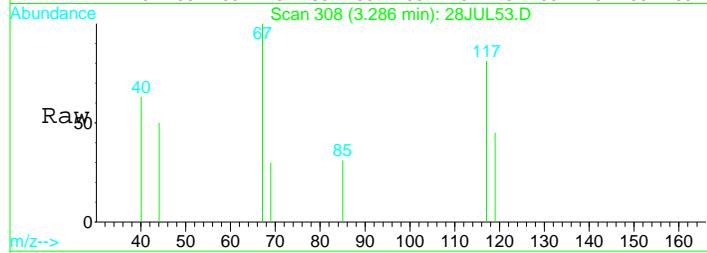
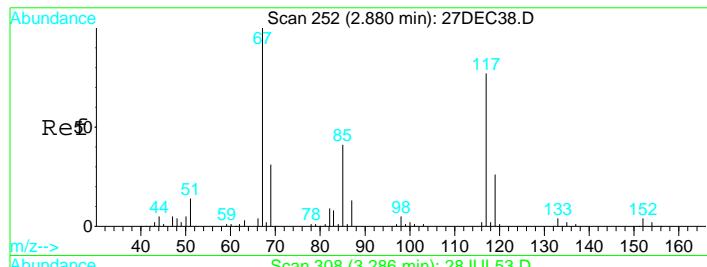
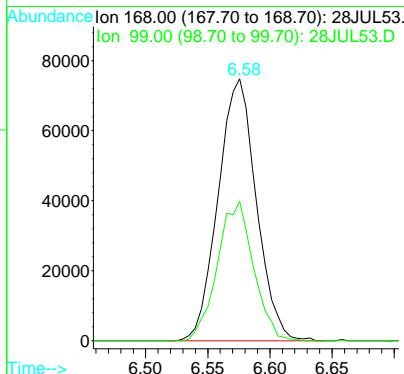
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration





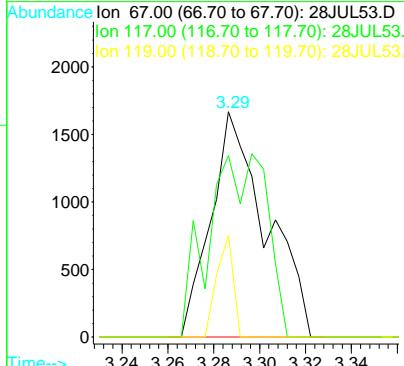
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.58 min Scan# 950
 Delta R.T. 0.00 min
 Lab File: 28JUL53.D
 Acq: 29 Jul 2017 3:26 am

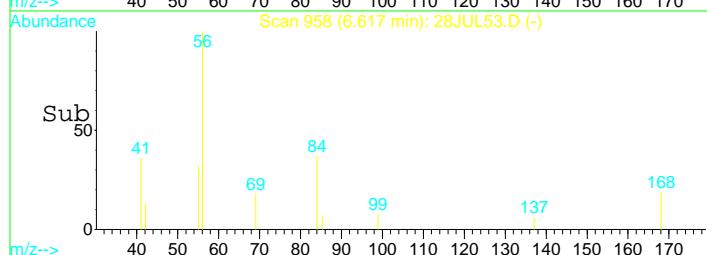
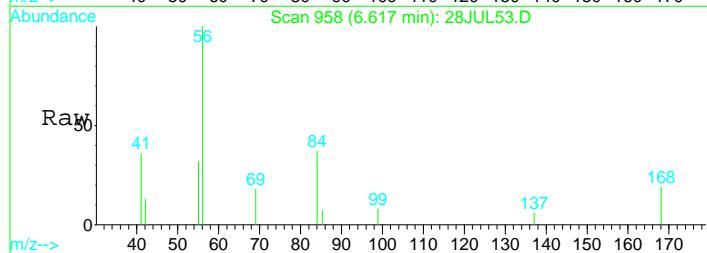
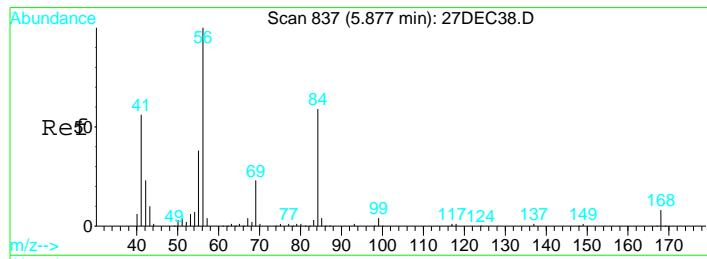
Tgt Ion: 168 Resp: 159704
 Ion Ratio Lower Upper
 168 100
 99 50.3 36.1 67.1



#4
 1,2-dichlorotrifluoroethane
 Concen: 0.26 ug/L
 RT: 3.29 min Scan# 308
 Delta R.T. -0.01 min
 Lab File: 28JUL53.D
 Acq: 29 Jul 2017 3:26 am

Tgt Ion: 67 Resp: 2788
 Ion Ratio Lower Upper
 67 100
 117 86.2 36.7 68.1#
 119 13.4 5.9 10.9#

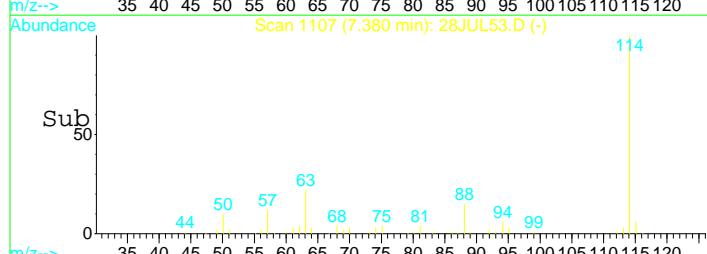
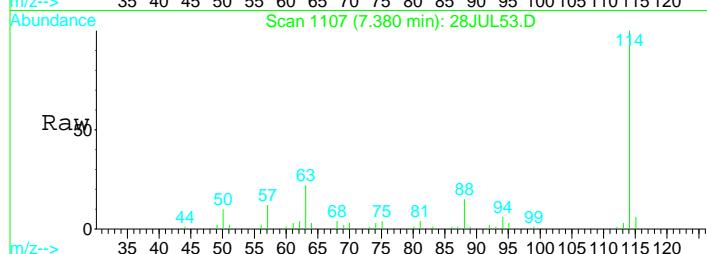
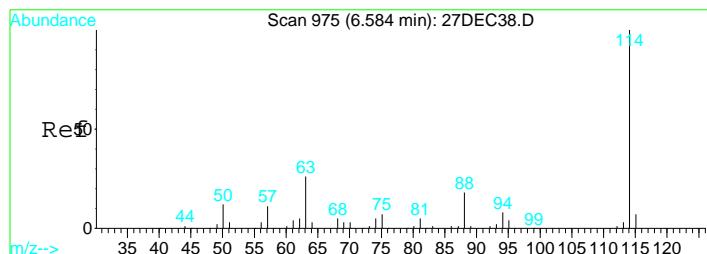
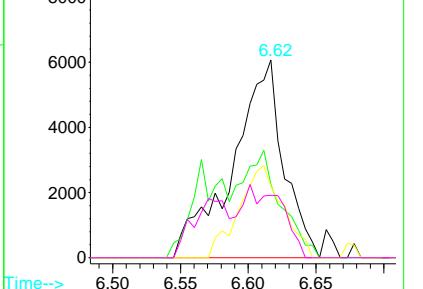




#27
Cyclohexane
Concen: 0.75 ug/L
RT: 6.62 min Scan# 958
Delta R.T. 0.01 min
Lab File: 28JUL53.D
Acq: 29 Jul 2017 3:26 am

Tgt Ion: 56 Resp: 15774
Ion Ratio Lower Upper
56 100
84 37.9 29.5 54.7
41 40.1 26.4 49.0
55 27.6 13.9 25.9#

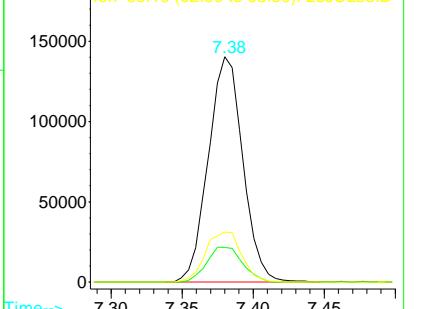
Abundance
Ion 56.10 (55.80 to 56.80): 28JUL53.D
Ion 84.10 (83.80 to 84.80): 28JUL53.D
Ion 41.10 (40.80 to 41.80): 28JUL53.D
Ion 55.10 (54.80 to 55.80): 28JUL53.D

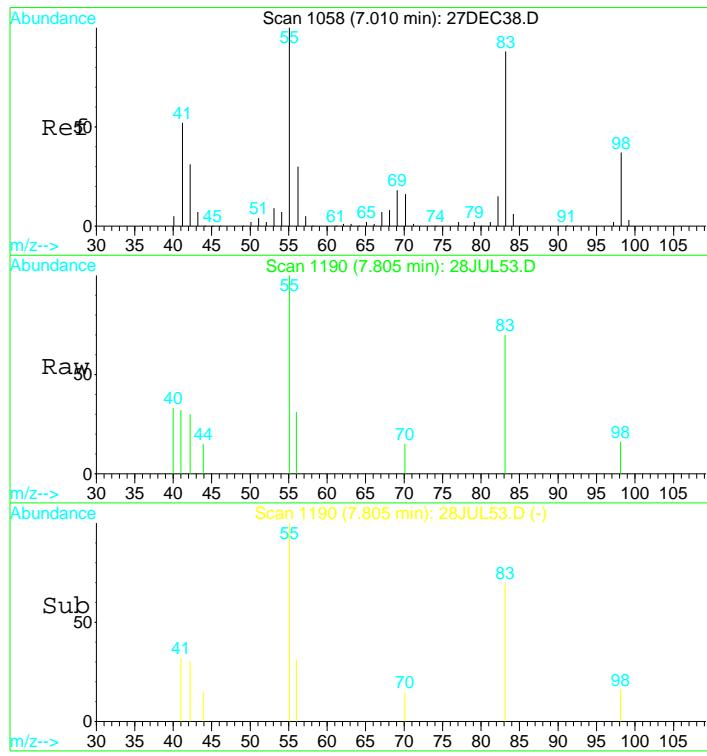


#29
1,4-Difluorobenzene IS#2
Concen: 10.00 ug/L
RT: 7.38 min Scan# 1107
Delta R.T. 0.00 min
Lab File: 28JUL53.D
Acq: 29 Jul 2017 3:26 am

Tgt Ion: 114 Resp: 237414
Ion Ratio Lower Upper
114 100
88 16.1 11.1 20.7
63 23.3 16.4 30.4

Abundance
Ion 114.00 (113.70 to 114.70): 28JUL53.D
Ion 88.00 (87.70 to 88.70): 28JUL53.D
Ion 63.10 (62.80 to 63.80): 28JUL53.D

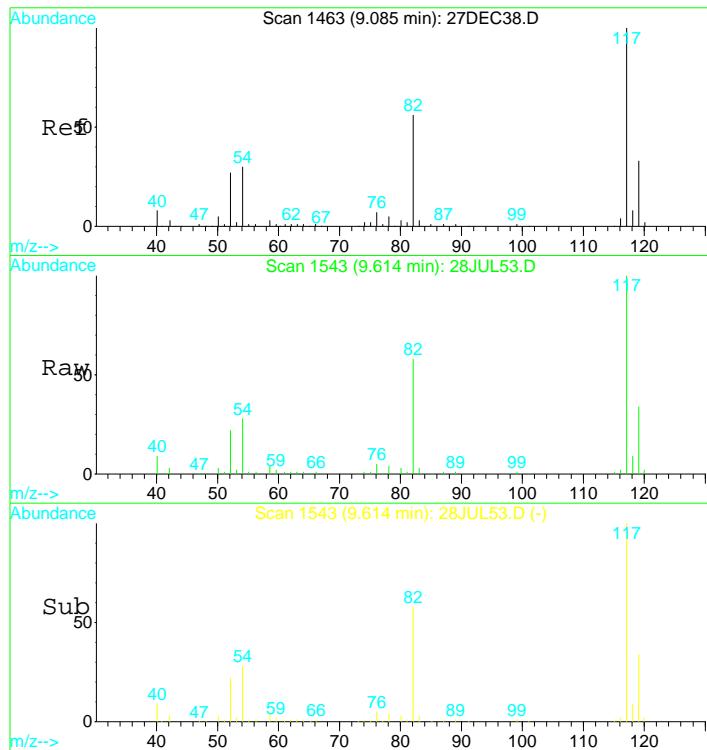
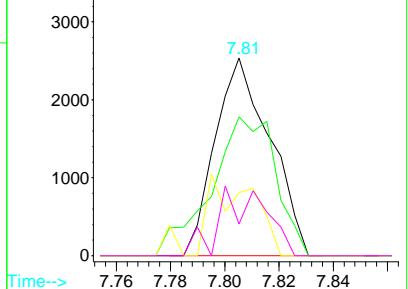




#31
Methylcyclohexane
Concen: 0.25 ug/L
RT: 7.81 min Scan# 1190
Delta R.T. 0.00 min
Lab File: 28JUL53.D
Acq: 29 Jul 2017 3:26 am

Tgt Ion: 55 Resp: 3567
Ion Ratio Lower Upper
55 100
83 82.7 56.7 105.3
41 36.2 34.9 64.9
98 29.6 28.3 52.5

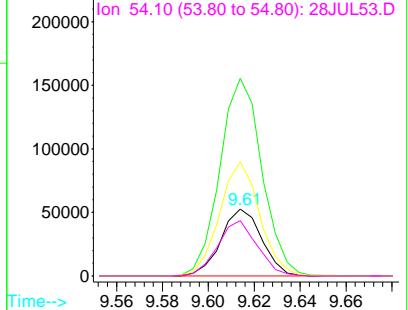
Abundance
Ion 55.10 (54.80 to 55.80): 28JUL53.D
Ion 83.10 (82.80 to 83.80): 28JUL53.D
Ion 41.10 (40.80 to 41.80): 28JUL53.D
Ion 98.10 (97.80 to 98.80): 28JUL53.D



#36
Chlorobenzene d5 IS#3
Concen: 10.00 ug/L
RT: 9.61 min Scan# 1543
Delta R.T. 0.00 min
Lab File: 28JUL53.D
Acq: 29 Jul 2017 3:26 am

Tgt Ion: 119 Resp: 65025
Ion Ratio Lower Upper
119 100
117 304.3 217.1 403.3
82 167.7 122.7 227.9
54 80.5 55.2 102.6

Abundance
Ion 119.00 (118.70 to 119.70): 28JUL53.
Ion 117.00 (116.70 to 117.70): 28JUL53.
Ion 82.10 (81.80 to 82.80): 28JUL53.D
Ion 54.10 (53.80 to 54.80): 28JUL53.D



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL54.D Vial: 54
 Acq On : 29 Jul 2017 3:49 am Operator: MGC
 Sample : 1720267-04 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multipllr: 1.00

MS Integration Params: rteint.p
 Quant Time: Jul 29 9:21 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	165003	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	238536	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	65921	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	47008	9.75	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	97.50%
31) Toluene d8 SMC#2	8.60	98	292017	9.91	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.10%
49) Bromofluorobenzene SMC#3	10.35	95	95921	9.74	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.40%

Target Compounds

					Qvalue
4) Vinyl chloride	2.07	62	94763	7.66	ug/L 80
12) T-1,2-dichloroethene	4.50	96	21300	2.58	ug/L 93
13) 1,1-Dichloroethane	5.05	63	10225	0.58	ug/L 93
15) Cis-1,2-dichloroethene	5.83	96	142231	16.51	ug/L 87
23) Benzene	6.93	78	3888	0.12	ug/L # 1
25) Trichloroethene	7.60	130	5581	0.68	ug/L 92

(#) = qualifier out of range (m) = manual integration

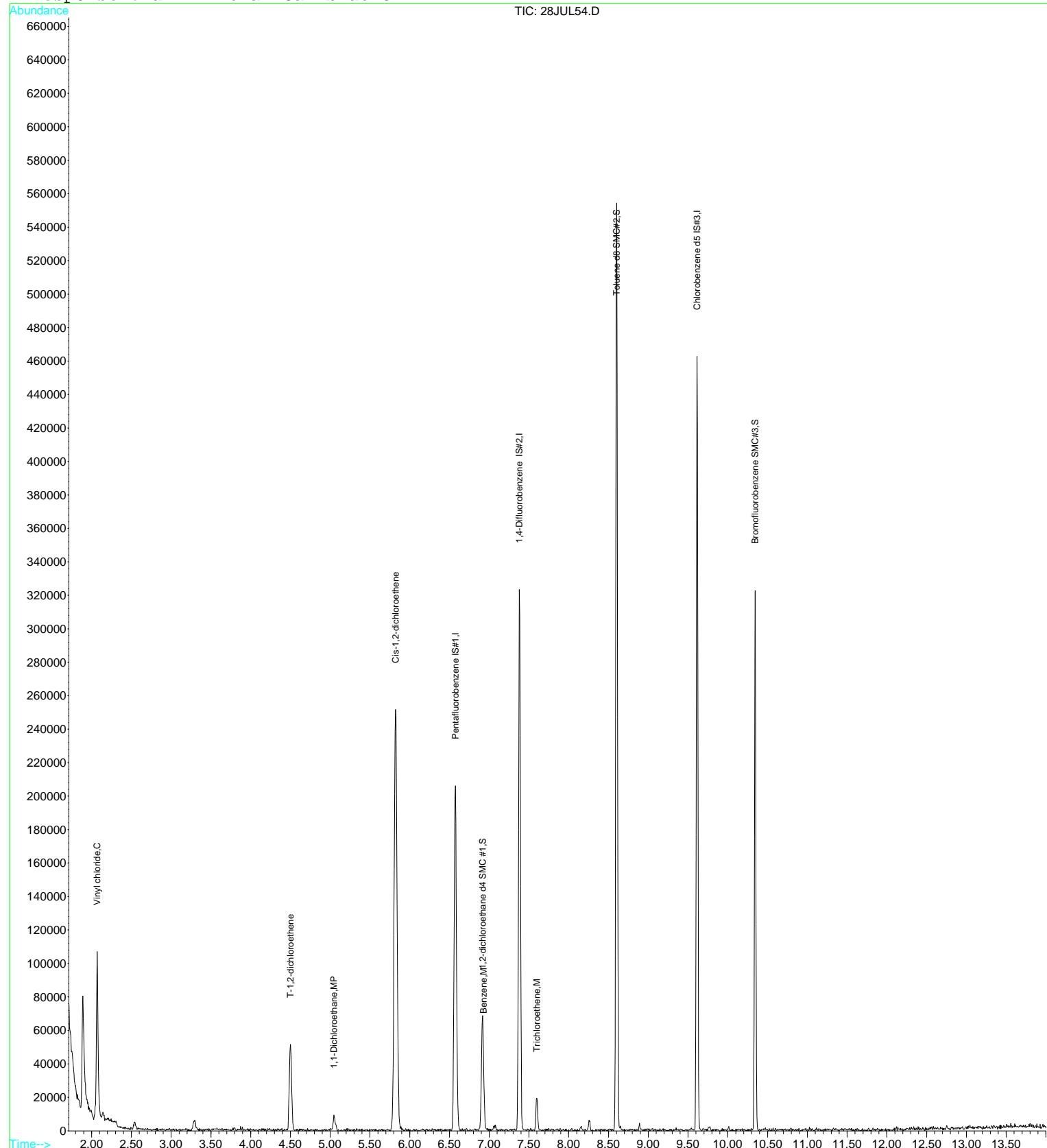
28JUL54.D 82605.M Sat Jul 29 09:26:11 2017

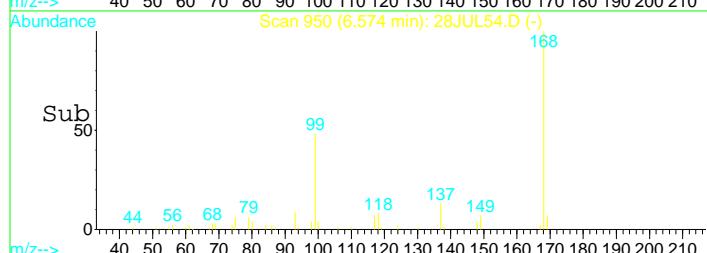
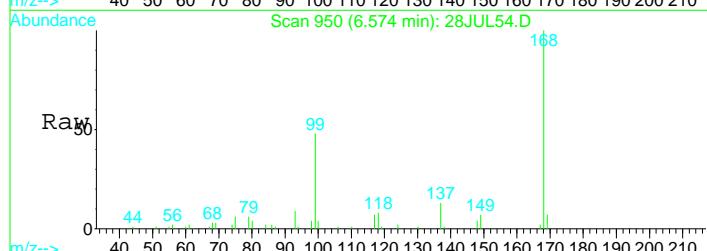
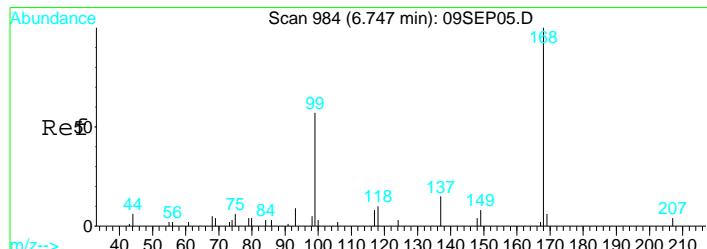
Page 1

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL54.D Vial: 54
 Acq On : 29 Jul 2017 3:49 am Operator: MGC
 Sample : 1720267-04 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:21 2017 Quant Results File: 82605.RES

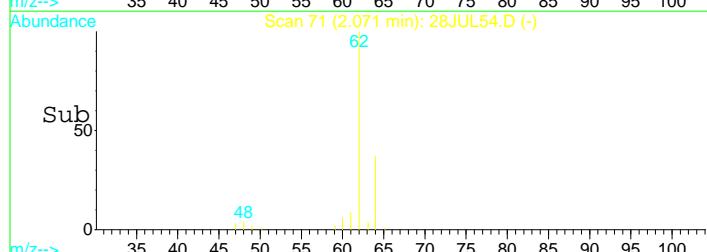
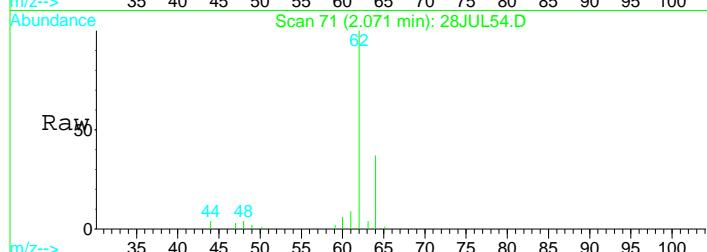
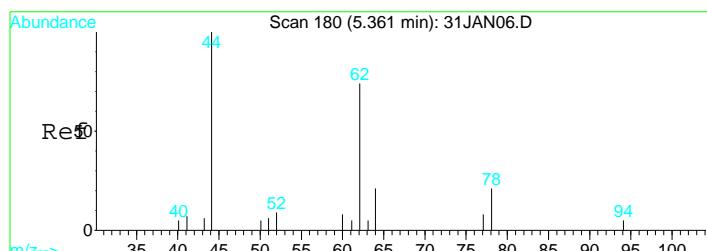
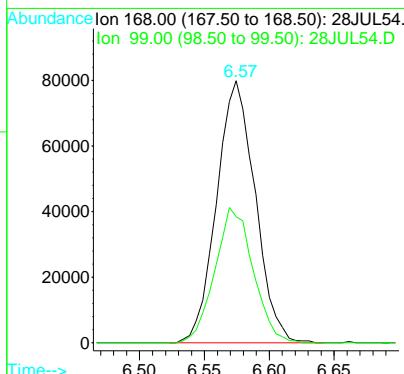
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration





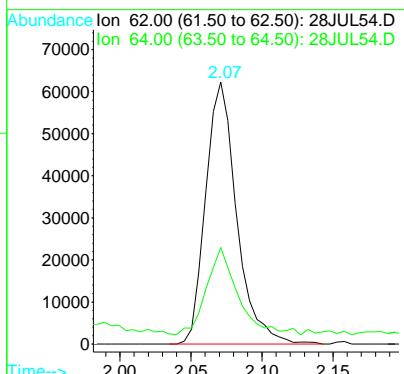
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 28JUL54.D
 Acq: 29 Jul 2017 3:49 am

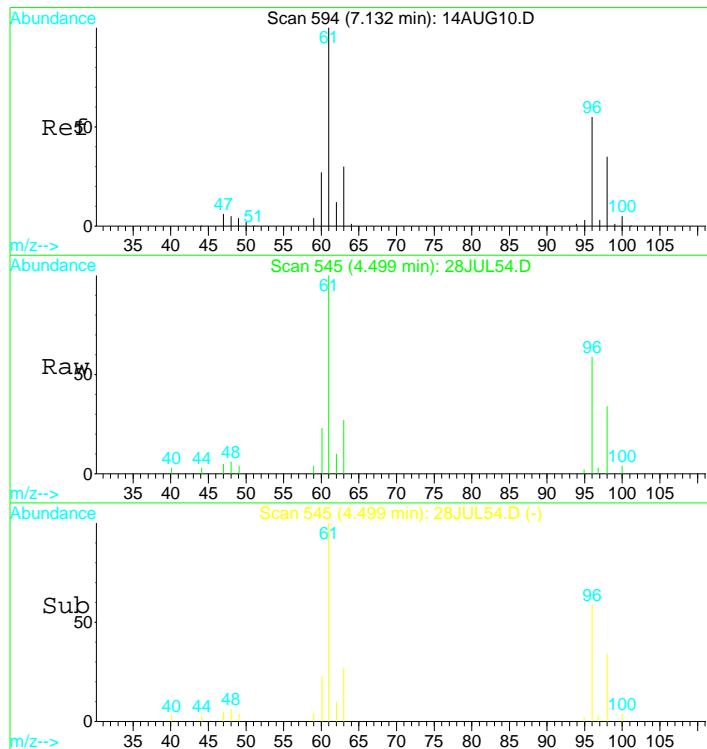
Tgt Ion: 168 Resp: 165003
 Ion Ratio Lower Upper
 168 100
 99 51.0 38.7 71.9



#4
 Vinyl chloride
 Concen: 7.66 ug/L
 RT: 2.07 min Scan# 71
 Delta R.T. -0.00 min
 Lab File: 28JUL54.D
 Acq: 29 Jul 2017 3:49 am

Tgt Ion: 62 Resp: 94763
 Ion Ratio Lower Upper
 62 100
 64 41.4 39.3 72.9

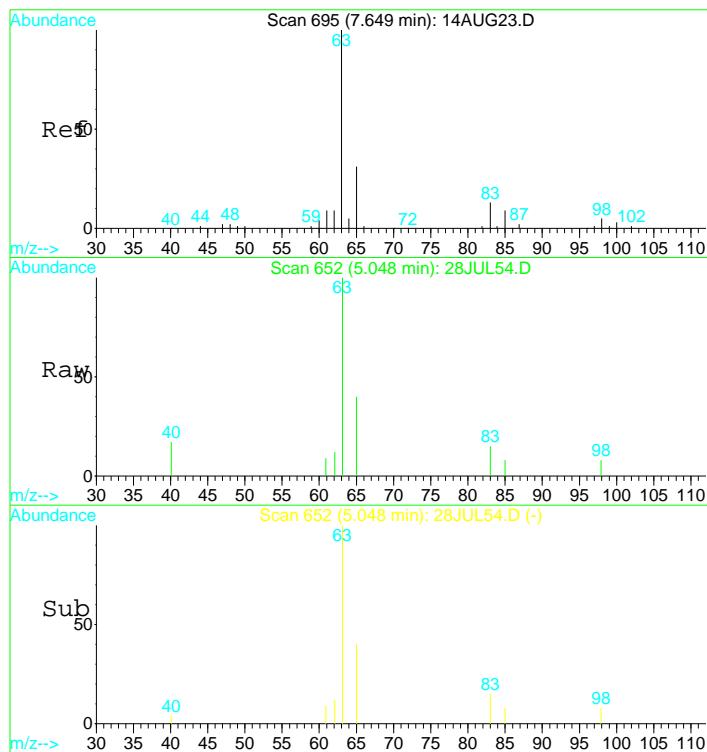
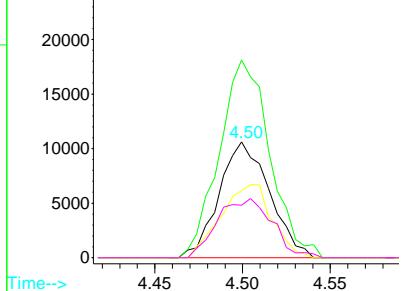




#12
 T-1,2-dichloroethene
 Concen: 2.58 ug/L
 RT: 4.50 min Scan# 545
 Delta R.T. -0.00 min
 Lab File: 28JUL54.D
 Acq: 29 Jul 2017 3:49 am

Tgt Ion: 96 Resp: 21300
 Ion Ratio Lower Upper
 96 100
 61 170.7 129.4 240.4
 98 64.0 41.5 77.1
 63 55.6 39.3 73.1

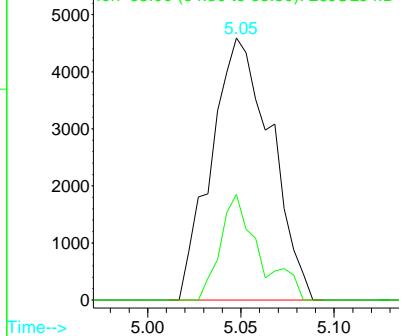
Abundance
 Ion 96.00 (95.50 to 96.50): 28JUL54.D
 Ion 61.00 (60.50 to 61.50): 28JUL54.D
 Ion 98.00 (97.50 to 98.50): 28JUL54.D
 Ion 63.00 (62.50 to 63.50): 28JUL54.D

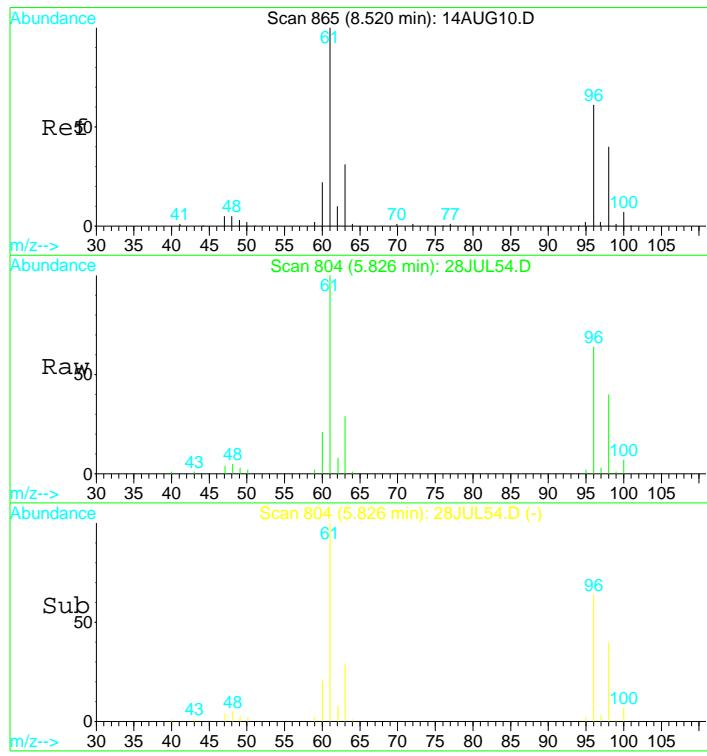


#13
 1,1-Dichloroethane
 Concen: 0.58 ug/L
 RT: 5.05 min Scan# 652
 Delta R.T. -0.00 min
 Lab File: 28JUL54.D
 Acq: 29 Jul 2017 3:49 am

Tgt Ion: 63 Resp: 10225
 Ion Ratio Lower Upper
 63 100
 65 26.1 20.8 38.6

Abundance
 Ion 63.00 (62.50 to 63.50): 28JUL54.D
 Ion 65.00 (64.50 to 65.50): 28JUL54.D

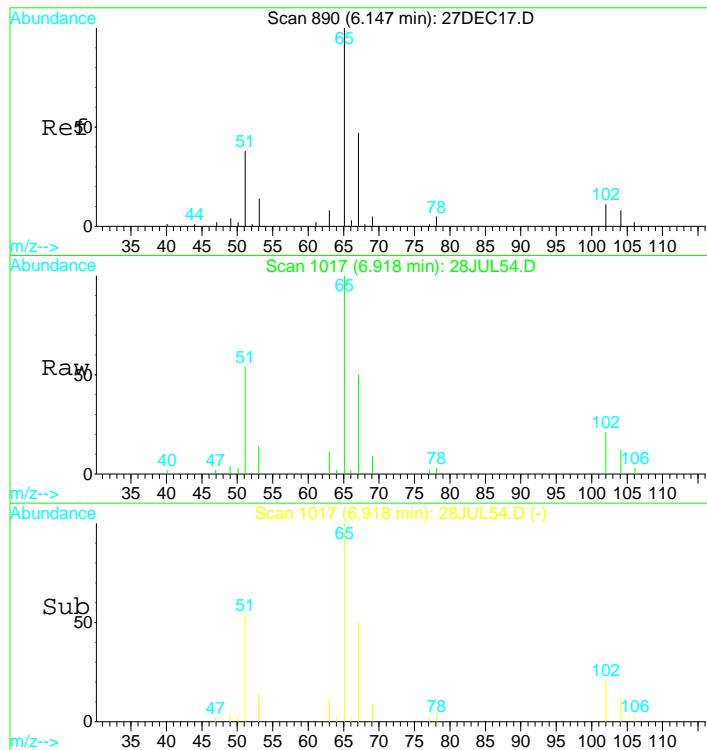
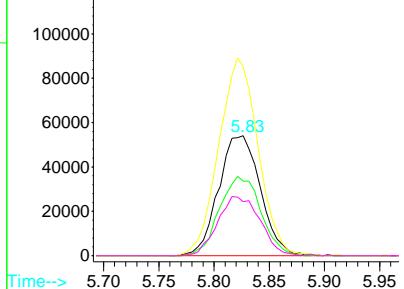




#15
 Cis-1,2-dichloroethene
 Concen: 16.51 ug/L
 RT: 5.83 min Scan# 804
 Delta R.T. 0.00 min
 Lab File: 28JUL54.D
 Acq: 29 Jul 2017 3:49 am

Tgt Ion: 96 Resp: 142231
 Ion Ratio Lower Upper
 96 100
 98 65.3 51.9 96.3
 61 154.9 122.8 228.0
 63 50.0 42.1 78.3

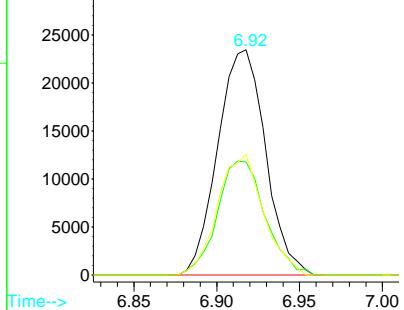
Abundance
 Ion 96.00 (95.50 to 96.50): 28JUL54.D
 140000
 Ion 98.00 (97.50 to 98.50): 28JUL54.D
 Ion 61.00 (60.50 to 61.50): 28JUL54.D
 Ion 63.00 (62.50 to 63.50): 28JUL54.D

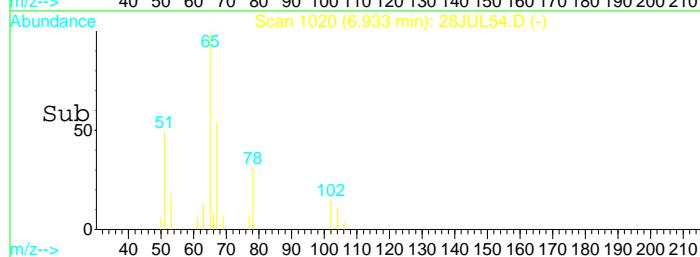
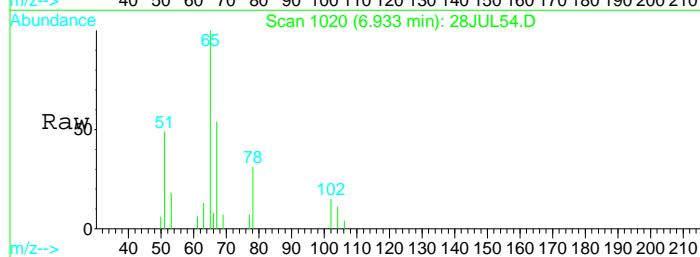
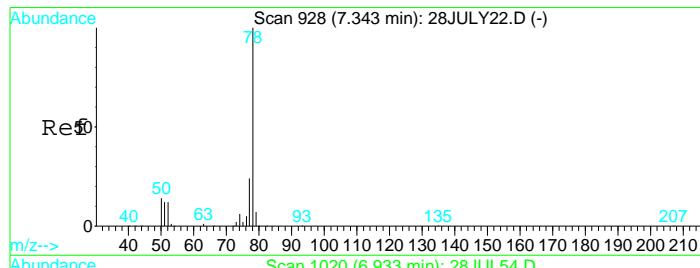


#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.92 min Scan# 1017
 Delta R.T. 0.00 min
 Lab File: 28JUL54.D
 Acq: 29 Jul 2017 3:49 am

Tgt Ion: 65 Resp: 47008
 Ion Ratio Lower Upper
 65 100
 67 50.6 36.2 67.2
 51 51.3 42.0 78.0

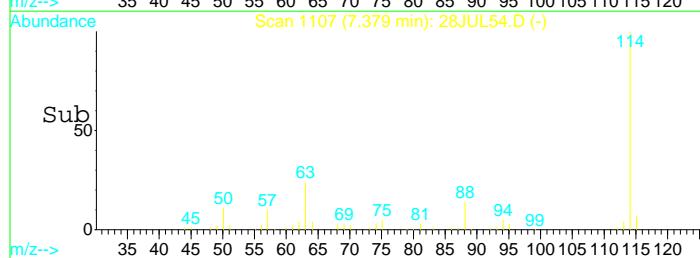
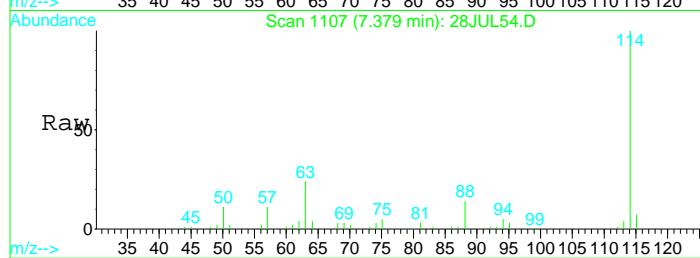
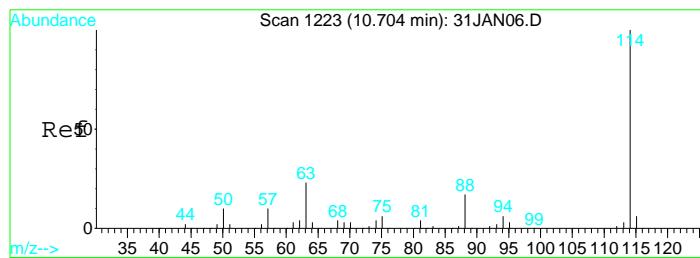
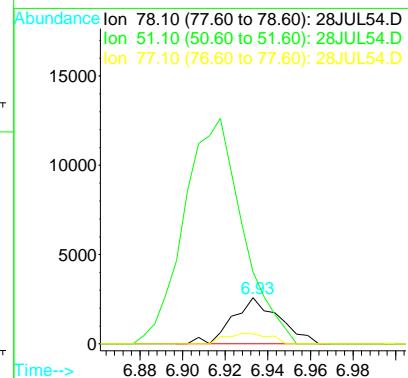
Abundance
 Ion 65.10 (64.60 to 65.60): 28JUL54.D
 30000
 Ion 67.10 (66.60 to 67.60): 28JUL54.D
 Ion 51.10 (50.60 to 51.60): 28JUL54.D





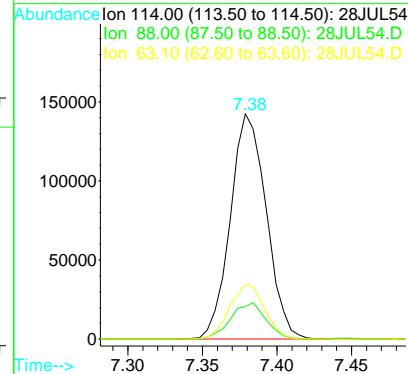
#23
 Benzene
 Concen: 0.12 ug/L
 RT: 6.93 min Scan# 1020
 Delta R.T. -0.00 min
 Lab File: 28JUL54.D
 Acq: 29 Jul 2017 3:49 am

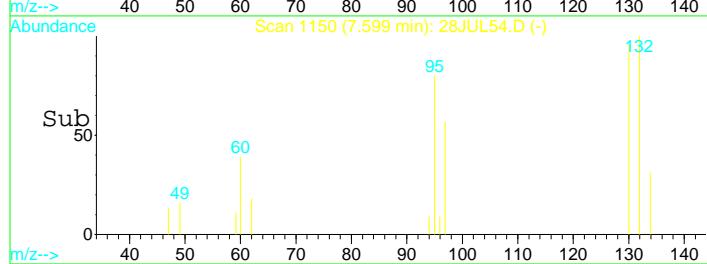
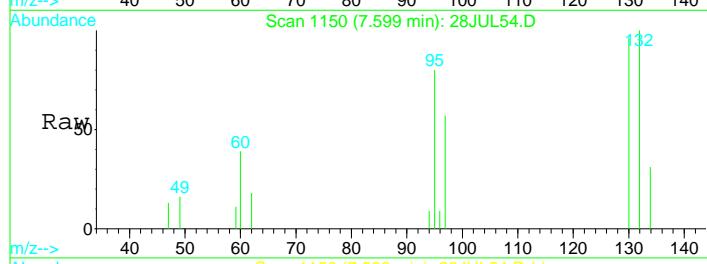
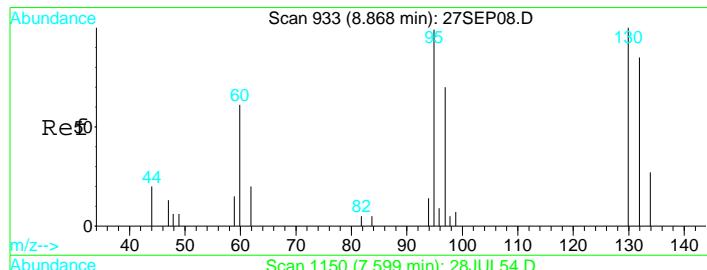
Tgt Ion: 78 Resp: 3888
 Ion Ratio Lower Upper
 78 100
 51 620.7 114.8 213.2#
 77 22.1 15.2 28.2



#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1107
 Delta R.T. -0.00 min
 Lab File: 28JUL54.D
 Acq: 29 Jul 2017 3:49 am

Tgt Ion: 114 Resp: 238536
 Ion Ratio Lower Upper
 114 100
 88 15.8 11.7 21.7
 63 23.7 16.7 30.9

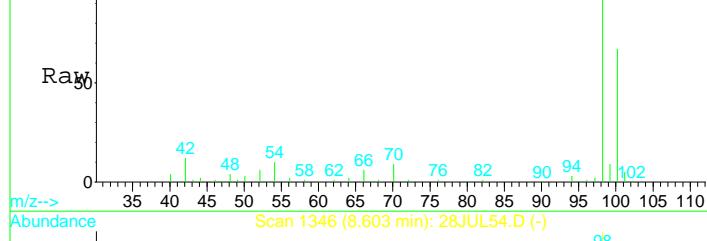
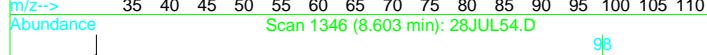
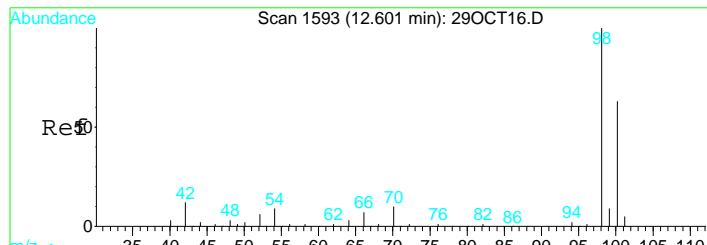
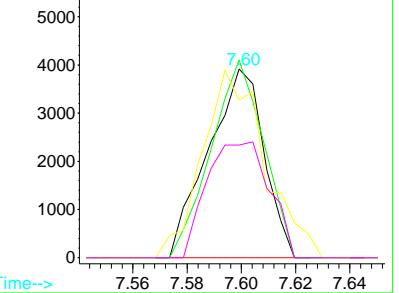




#25
 Trichloroethene
 Concen: 0.68 ug/L
 RT: 7.60 min Scan# 1150
 Delta R.T. 0.00 min
 Lab File: 28JUL54.D
 Acq: 29 Jul 2017 3:49 am

Tgt Ion: 130 Resp: 5581
 Ion Ratio Lower Upper
 130 100
 132 98.9 66.1 122.7
 95 111.4 86.1 159.9
 97 69.1 52.8 98.0

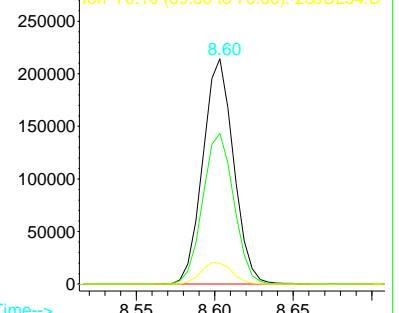
Abundance
 Ion 129.90 (129.40 to 130.40): 28JUL54.
 Ion 131.90 (131.40 to 132.40): 28JUL54.
 Ion 95.00 (94.50 to 95.50): 28JUL54.D
 Ion 97.00 (96.50 to 97.50): 28JUL54.D

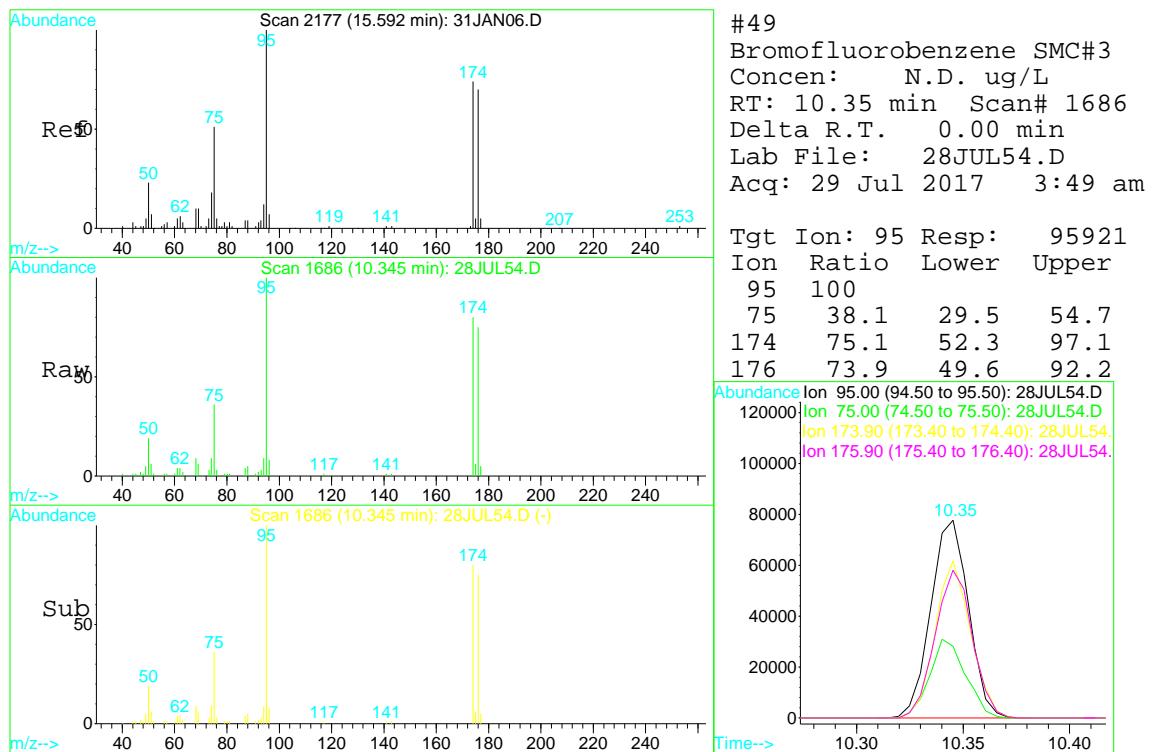
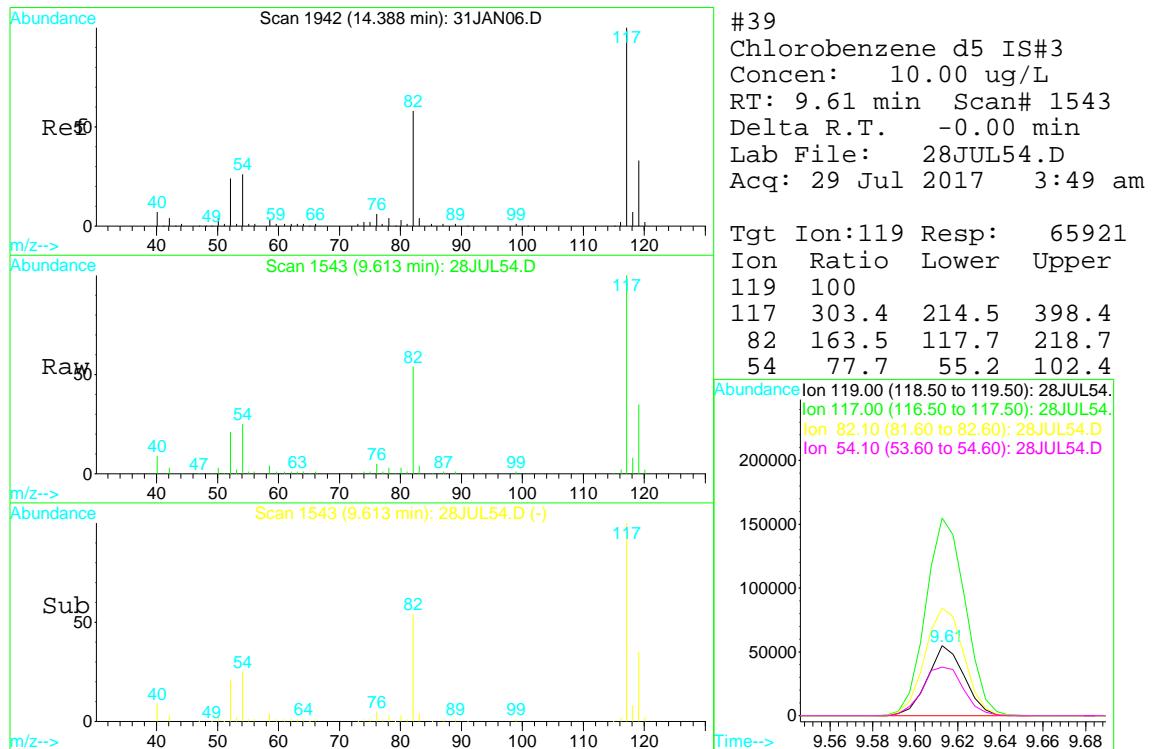


#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. 0.00 min
 Lab File: 28JUL54.D
 Acq: 29 Jul 2017 3:49 am

Tgt Ion: 98 Resp: 292017
 Ion Ratio Lower Upper
 98 100
 100 67.4 49.7 92.3
 70 9.7 7.3 13.7

Abundance
 Ion 98.10 (97.60 to 98.60): 28JUL54.D
 Ion 100.10 (99.60 to 100.60): 28JUL54.D
 Ion 70.10 (69.60 to 70.60): 28JUL54.D





Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL54.D Vial: 54
Acq On : 29 Jul 2017 3:49 am Operator: MGC
Sample : 1720267-04 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:29 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration
DataAcq Meth : 82605

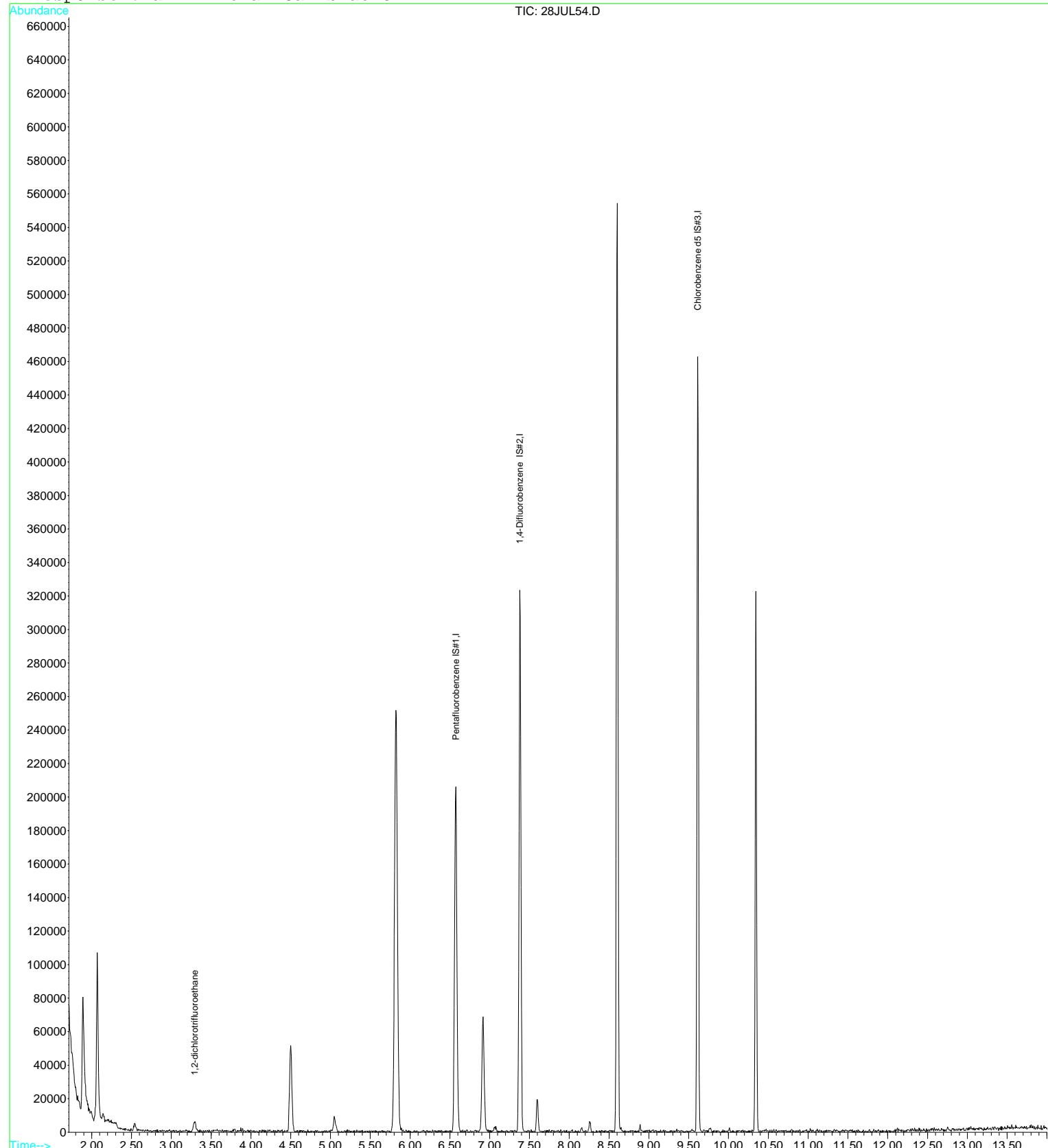
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----	-----	-----	-----	-----	-----	-----
1) Pentafluorobenzene IS#1	6.57	168	165003	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	238536	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	65921	10.00	ug/L	0.00

Target Compounds				Qvalue	
4) 1,2-dichlorotrifluoroethan	3.30	67	4912	0.45	ug/L # 84

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL54.D Vial: 54
Acq On : 29 Jul 2017 3:49 am Operator: MGC
Sample : 1720267-04 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:29 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL55.D Vial: 55
 Acq On : 29 Jul 2017 4:12 am Operator: MGC
 Sample : 1720267-05 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multipllr: 1.00

MS Integration Params: rteint.p
 Quant Time: Jul 29 9:22 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	165950	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	242355	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	64429	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	45720	9.43	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	94.30%
31) Toluene d8 SMC#2	8.60	98	291080	9.73	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.30%
49) Bromofluorobenzene SMC#3	10.34	95	91437	9.50	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	95.00%

Target Compounds

				Qvalue
4) Vinyl chloride	2.06	62	2850	0.23 ug/L # 1
12) T-1,2-dichloroethene	4.50	96	2194	0.26 ug/L # 66
15) Cis-1,2-dichloroethene	5.82	96	23785	2.74 ug/L 88
25) Trichloroethene	7.60	130	8307	1.00 ug/L 89
61) 1,4-Dichlorobenzene	11.04	146	2498	0.16 ug/L # 93
63) 1,2-Dichlorobenzene	11.24	146	3857	0.28 ug/L # 85

(#) = qualifier out of range (m) = manual integration

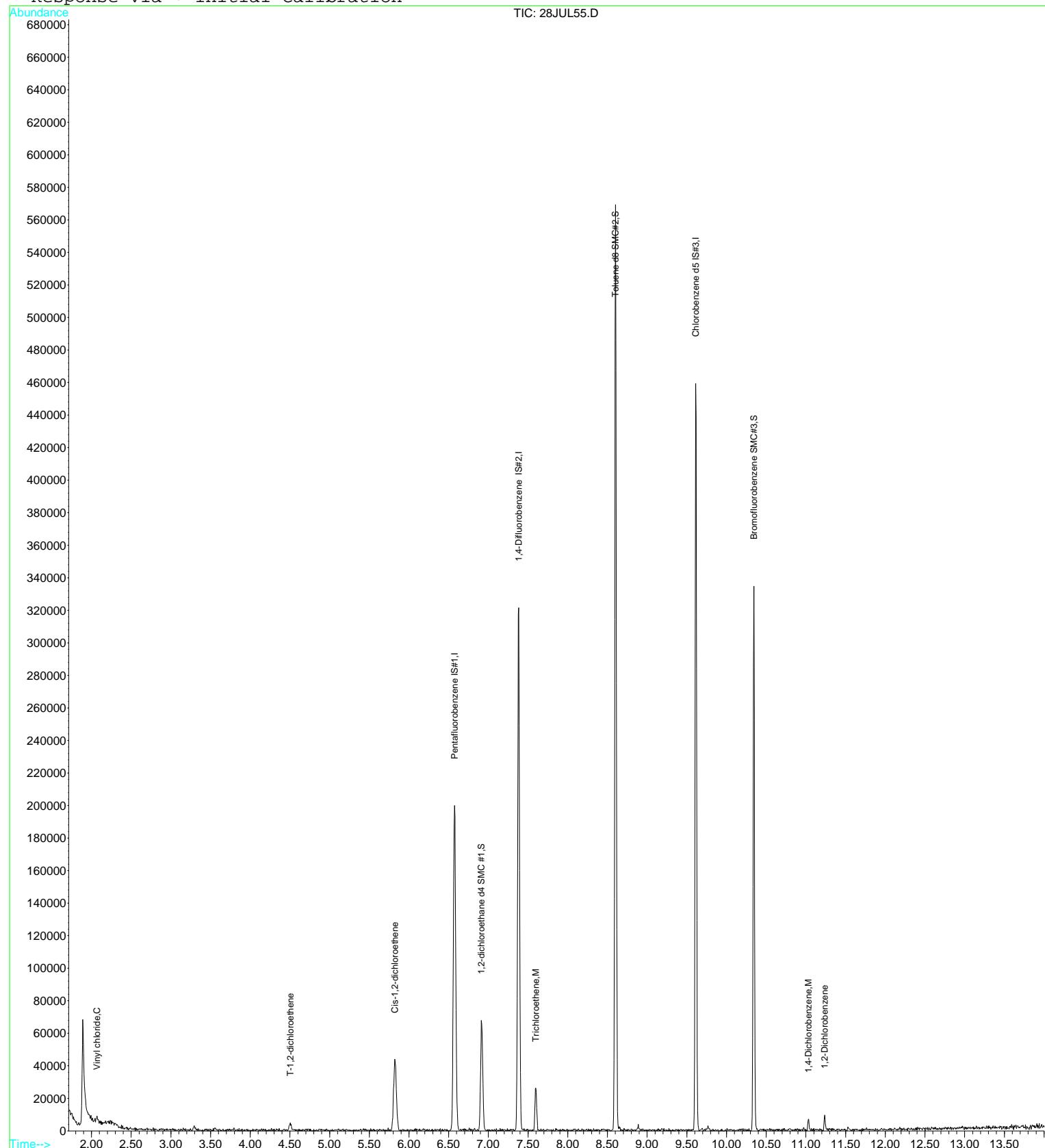
28JUL55.D 82605.M Sat Jul 29 09:26:12 2017

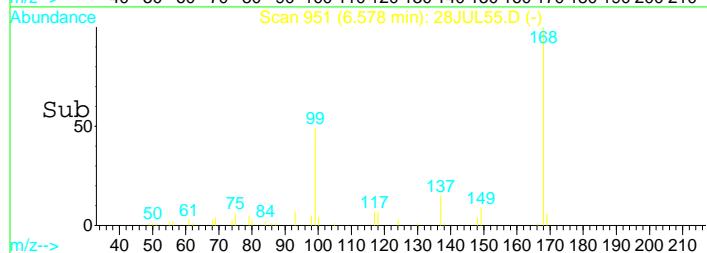
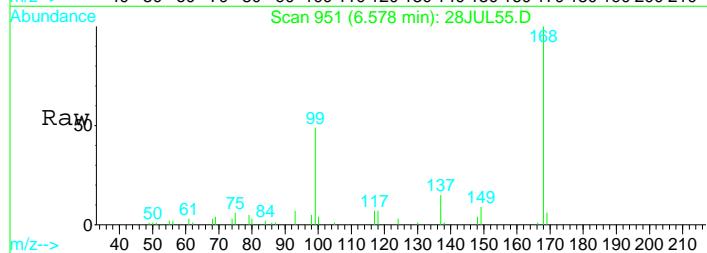
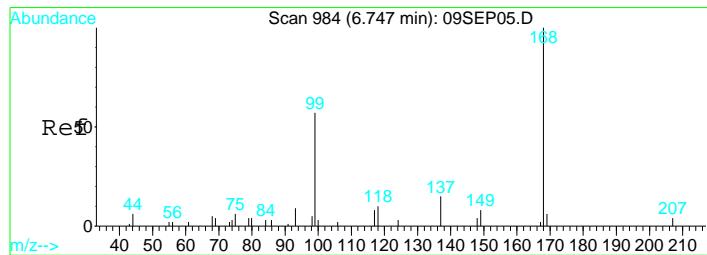
Page 1

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL55.D Vial: 55
 Acq On : 29 Jul 2017 4:12 am Operator: MGC
 Sample : 1720267-05 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:22 2017 Quant Results File: 82605.RES

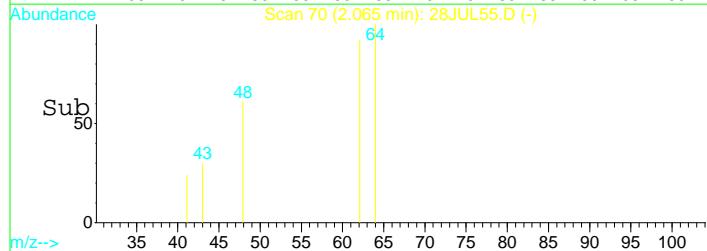
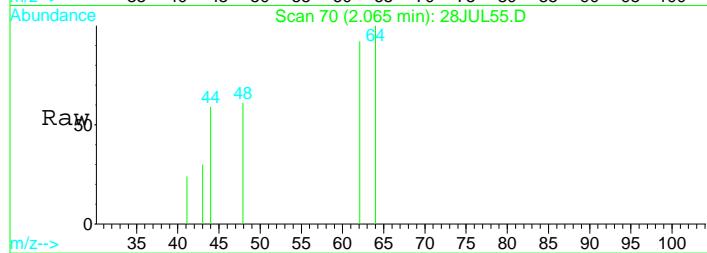
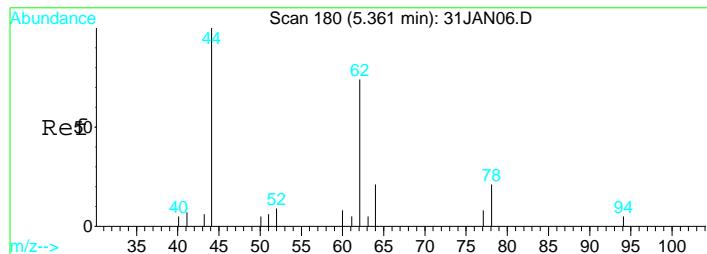
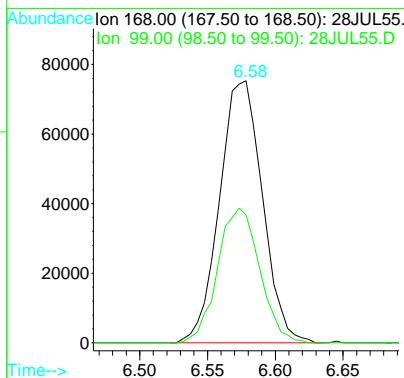
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration





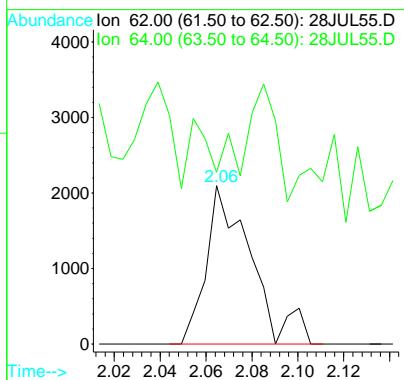
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.58 min Scan# 951
 Delta R.T. 0.00 min
 Lab File: 28JUL55.D
 Acq: 29 Jul 2017 4:12 am

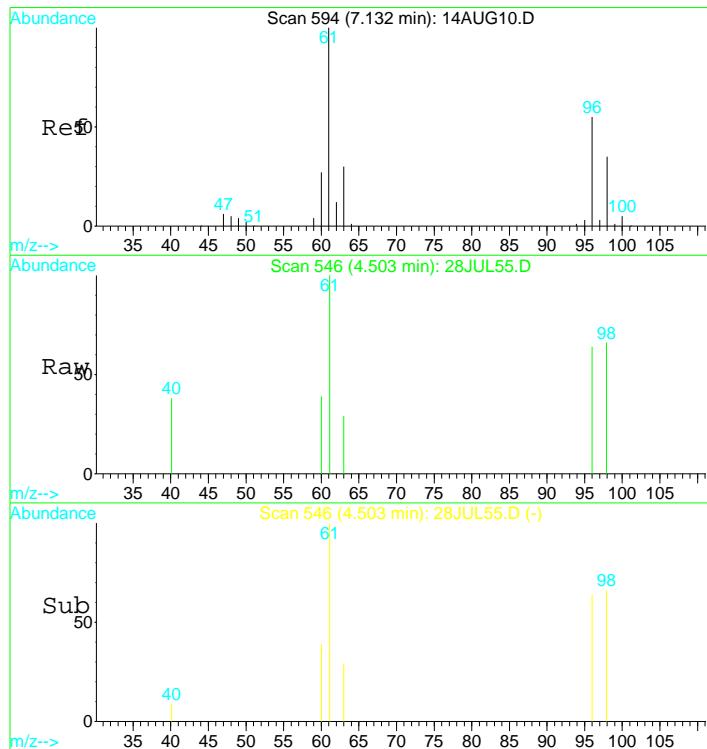
Tgt Ion: 168 Resp: 165950
 Ion Ratio Lower Upper
 168 100
 99 50.3 38.7 71.9



#4
 Vinyl chloride
 Concen: 0.23 ug/L
 RT: 2.06 min Scan# 70
 Delta R.T. -0.01 min
 Lab File: 28JUL55.D
 Acq: 29 Jul 2017 4:12 am

Tgt Ion: 62 Resp: 2850
 Ion Ratio Lower Upper
 62 100
 64 158.8 39.3 72.9#

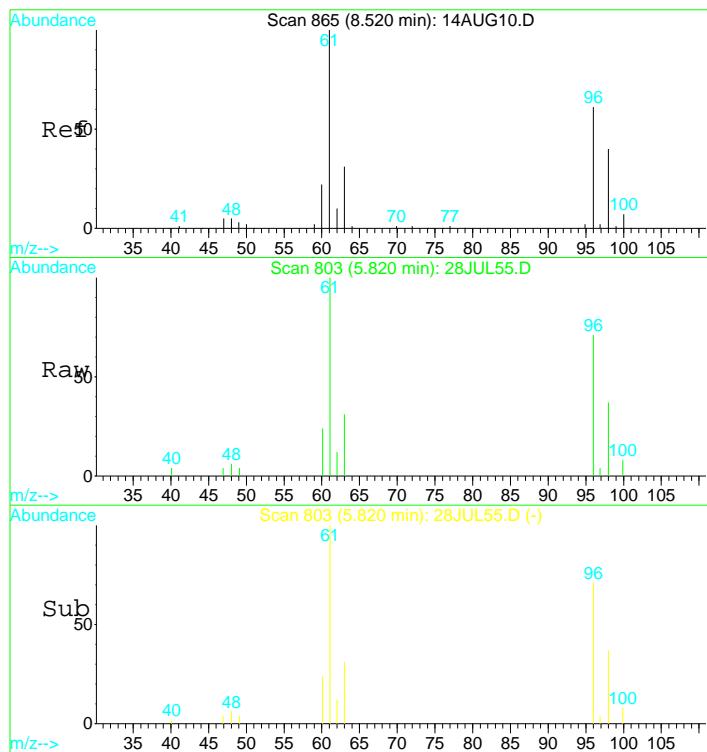
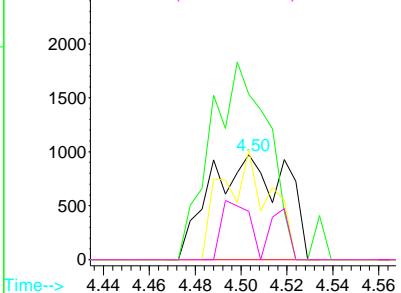




#12
 T-1,2-dichloroethene
 Concen: 0.26 ug/L
 RT: 4.50 min Scan# 546
 Delta R.T. 0.00 min
 Lab File: 28JUL55.D
 Acq: 29 Jul 2017 4:12 am

Tgt Ion: 96 Resp: 2194
 Ion Ratio Lower Upper
 96 100
 61 144.5 129.4 240.4
 98 28.3 41.5 77.1#
 63 21.0 39.3 73.1#

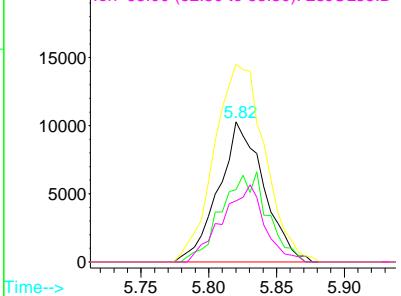
Abundance Ion 96.00 (95.50 to 96.50): 28JUL55.D
 Ion 61.00 (60.50 to 61.50): 28JUL55.D
 Ion 98.00 (97.50 to 98.50): 28JUL55.D
 Ion 63.00 (62.50 to 63.50): 28JUL55.D

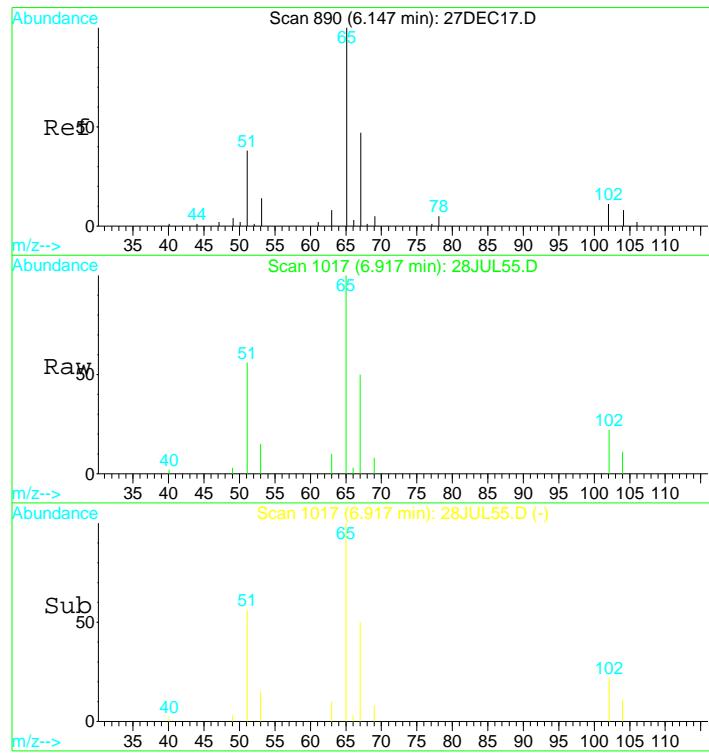


#15
 Cis-1,2-dichloroethene
 Concen: 2.74 ug/L
 RT: 5.82 min Scan# 803
 Delta R.T. -0.00 min
 Lab File: 28JUL55.D
 Acq: 29 Jul 2017 4:12 am

Tgt Ion: 96 Resp: 23785
 Ion Ratio Lower Upper
 96 100
 98 65.3 51.9 96.3
 61 158.6 122.8 228.0
 63 51.7 42.1 78.3

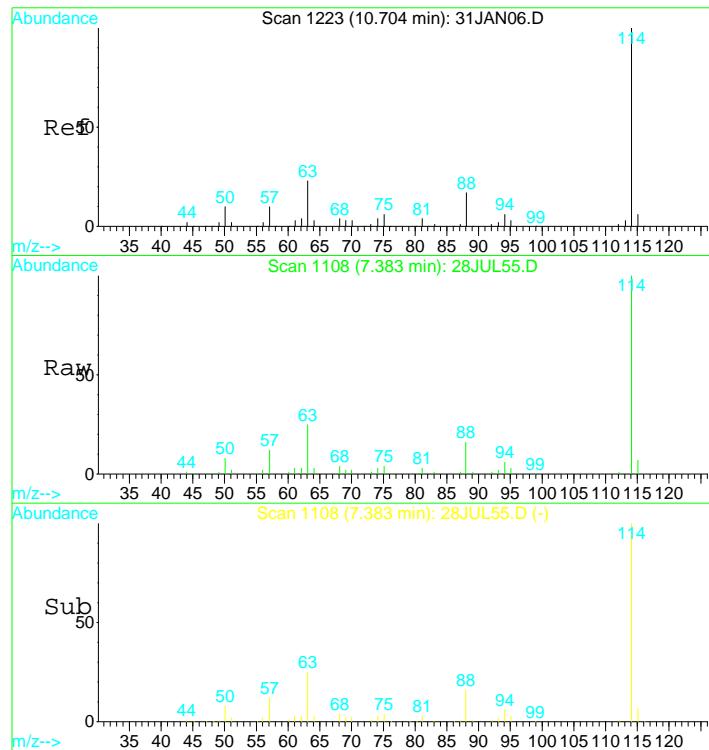
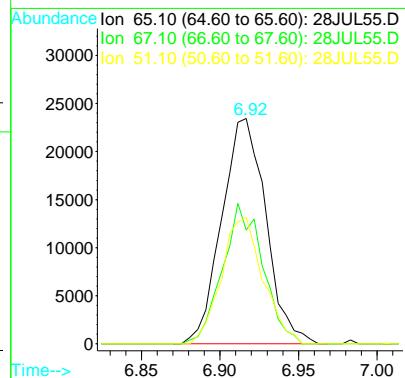
Abundance Ion 96.00 (95.50 to 96.50): 28JUL55.D
 Ion 98.00 (97.50 to 98.50): 28JUL55.D
 Ion 61.00 (60.50 to 61.50): 28JUL55.D
 Ion 63.00 (62.50 to 63.50): 28JUL55.D





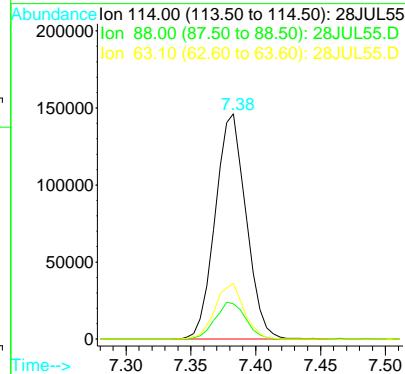
#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.92 min Scan# 1017
 Delta R.T. 0.00 min
 Lab File: 28JUL55.D
 Acq: 29 Jul 2017 4:12 am

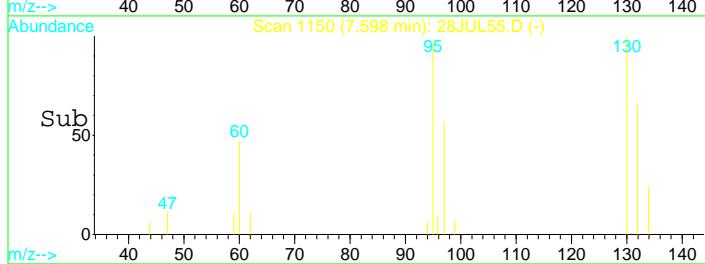
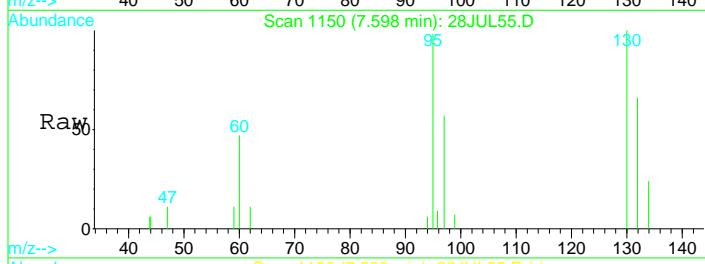
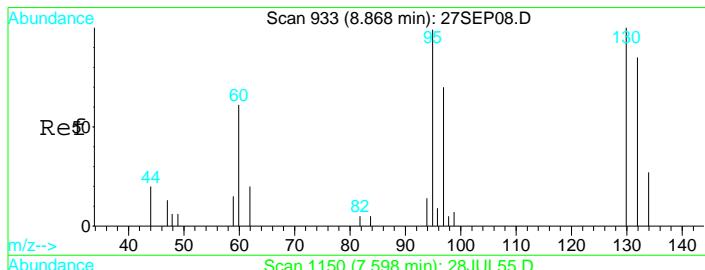
Tgt Ion: 65 Resp: 45720
 Ion Ratio Lower Upper
 65 100
 67 56.8 36.2 67.2
 51 53.1 42.0 78.0



#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1108
 Delta R.T. 0.00 min
 Lab File: 28JUL55.D
 Acq: 29 Jul 2017 4:12 am

Tgt Ion: 114 Resp: 242355
 Ion Ratio Lower Upper
 114 100
 88 16.0 11.7 21.7
 63 23.2 16.7 30.9

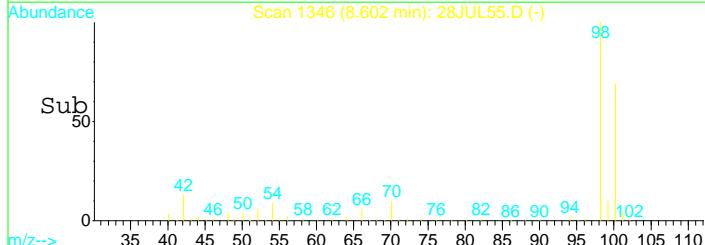
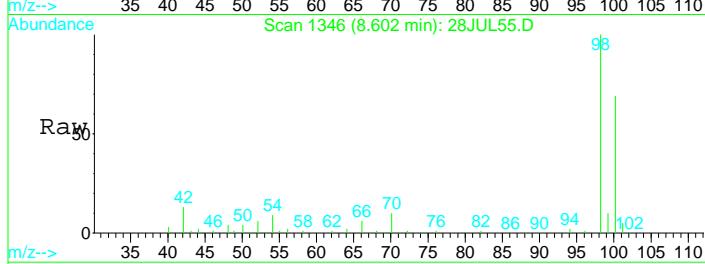
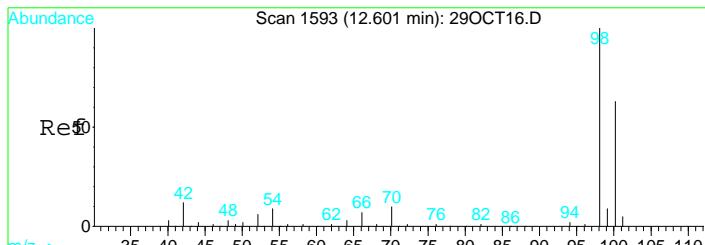
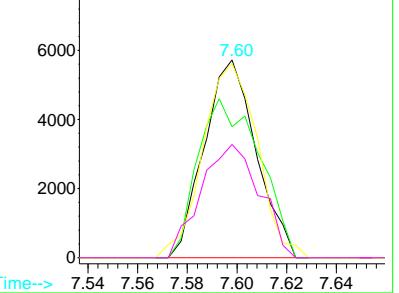




#25
 Trichloroethene
 Concen: 1.00 ug/L
 RT: 7.60 min Scan# 1150
 Delta R.T. 0.00 min
 Lab File: 28JUL55.D
 Acq: 29 Jul 2017 4:12 am

Tgt Ion: 130 Resp: 8307
 Ion Ratio Lower Upper
 130 100
 132 95.8 66.1 122.7
 95 102.9 86.1 159.9
 97 64.8 52.8 98.0

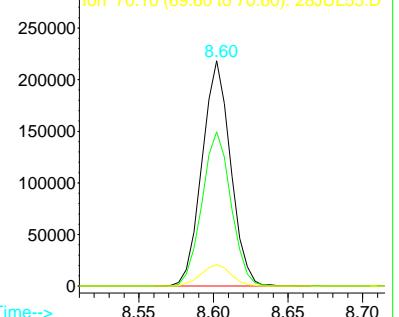
Abundance
 Ion 129.90 (129.40 to 130.40): 28JUL55.
 Ion 131.90 (131.40 to 132.40): 28JUL55.
 Ion 95.00 (94.50 to 95.50): 28JUL55.D
 Ion 97.00 (96.50 to 97.50): 28JUL55.D

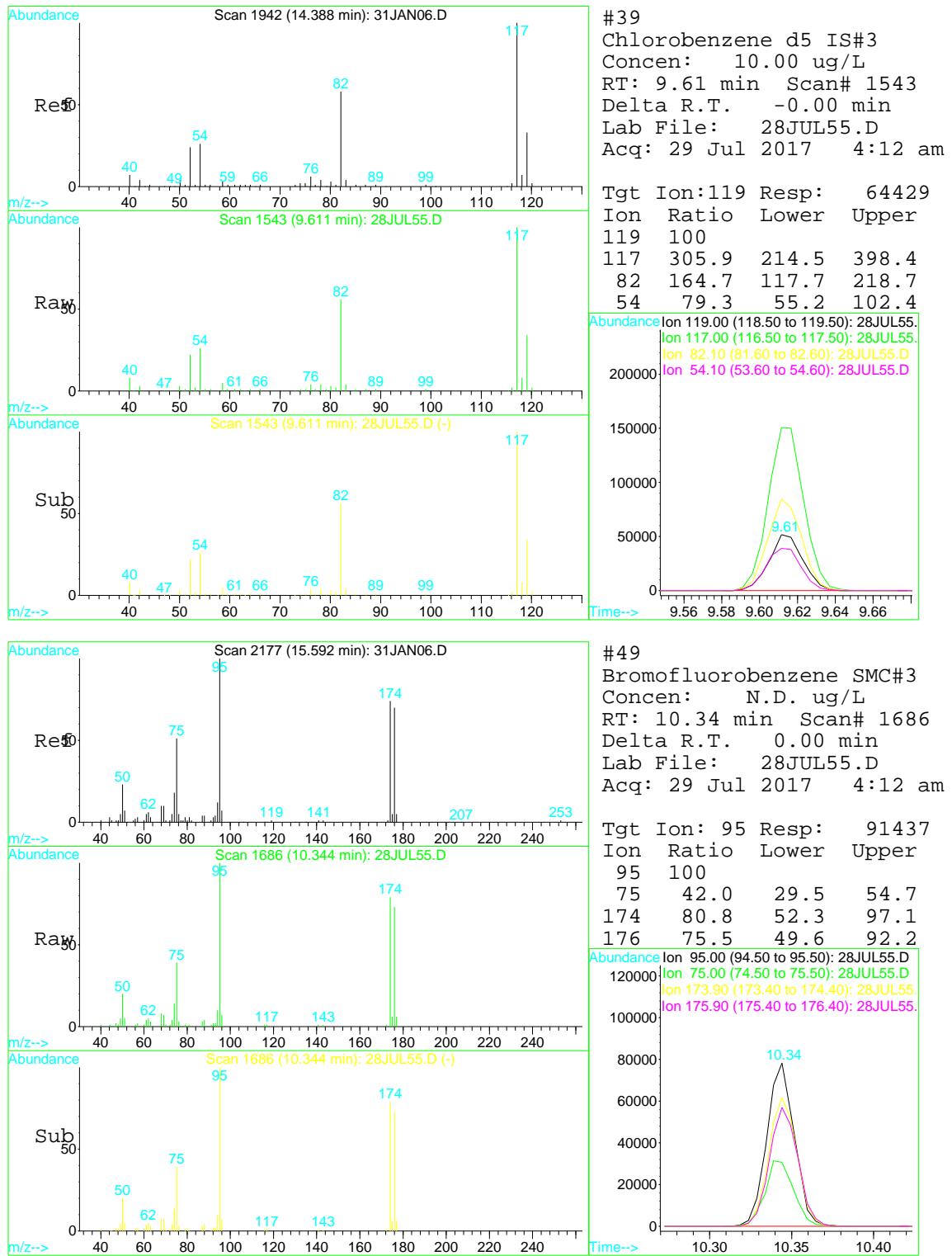


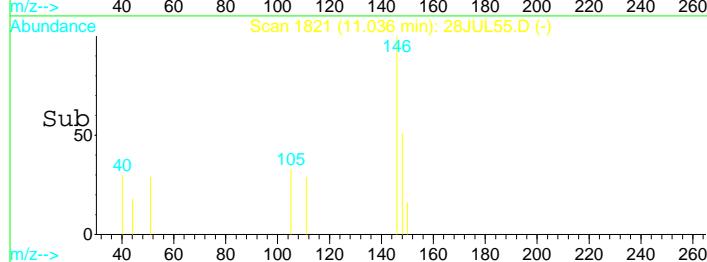
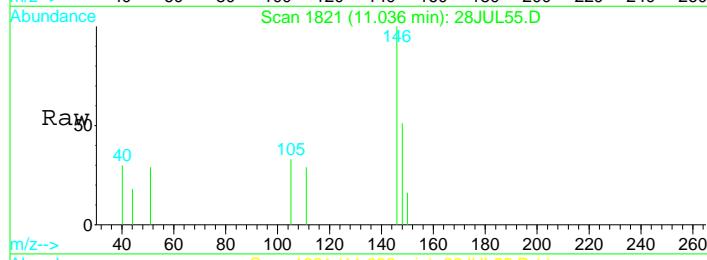
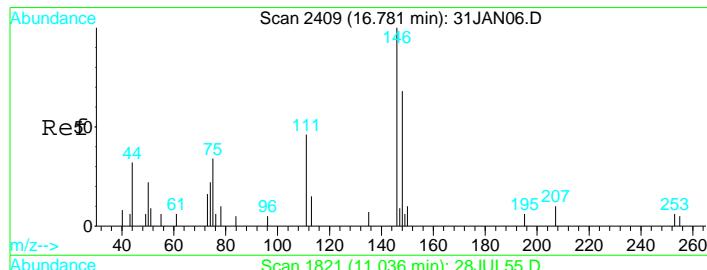
#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. 0.00 min
 Lab File: 28JUL55.D
 Acq: 29 Jul 2017 4:12 am

Tgt Ion: 98 Resp: 291080
 Ion Ratio Lower Upper
 98 100
 100 69.5 49.7 92.3
 70 10.0 7.3 13.7

Abundance
 Ion 98.10 (97.60 to 98.60): 28JUL55.D
 Ion 100.10 (99.60 to 100.60): 28JUL55.D
 Ion 70.10 (69.60 to 70.60): 28JUL55.D



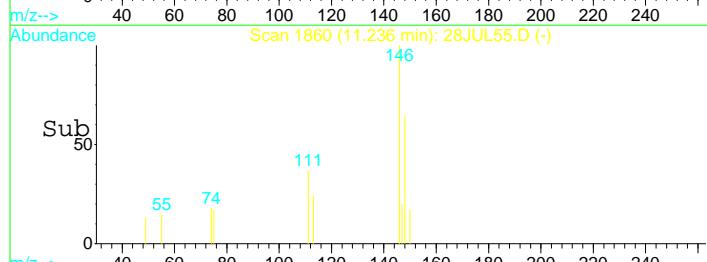
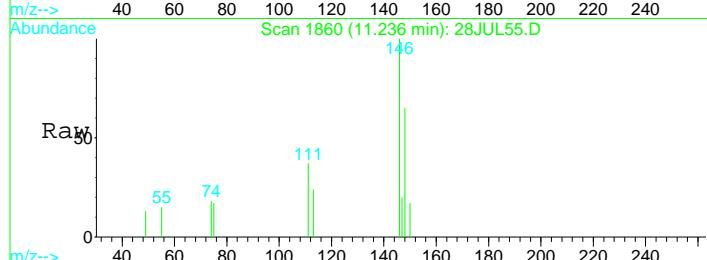
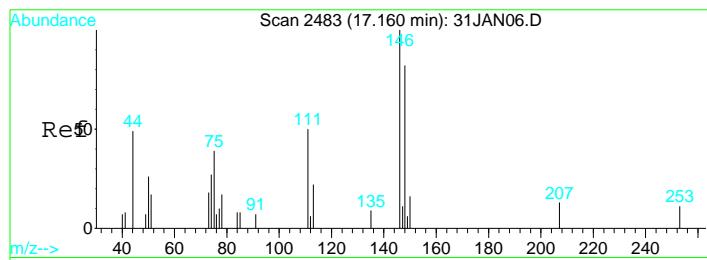
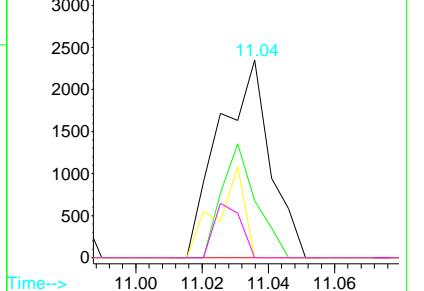




#61
1, 4-Dichlorobenzene
Concen: 0.16 ug/L
RT: 11.04 min Scan# 1821
Delta R.T. 0.00 min
Lab File: 28JUL55.D
Acq: 29 Jul 2017 4:12 am

Tgt Ion:146 Resp: 2498
Ion Ratio Lower Upper
146 100
111 38.8 28.1 52.3
75 25.5 20.3 37.7
50 14.5 16.0 29.6#

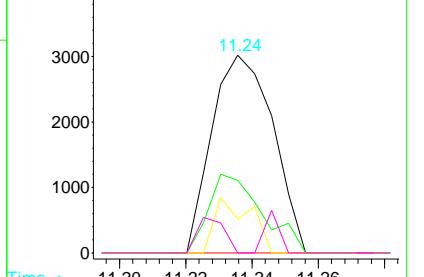
Abundance
Ion 146.00 (145.50 to 146.50): 28JUL55.
Ion 111.00 (110.50 to 111.50): 28JUL55.
Ion 75.00 (74.50 to 75.50): 28JUL55.D
Ion 50.10 (49.60 to 50.60): 28JUL55.D



#63
1, 2-Dichlorobenzene
Concen: 0.28 ug/L
RT: 11.24 min Scan# 1860
Delta R.T. -0.00 min
Lab File: 28JUL55.D
Acq: 29 Jul 2017 4:12 am

Tgt Ion:146 Resp: 3857
Ion Ratio Lower Upper
146 100
111 34.7 28.8 53.6
75 16.5 19.8 36.8#
50 8.0 9.7 17.9#

Abundance
Ion 146.00 (145.50 to 146.50): 28JUL55.
Ion 111.00 (110.50 to 111.50): 28JUL55.
Ion 75.00 (74.50 to 75.50): 28JUL55.D
Ion 50.10 (49.60 to 50.60): 28JUL55.D



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL55.D Vial: 55
Acq On : 29 Jul 2017 4:12 am Operator: MGC
Sample : 1720267-05 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:29 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration
DataAcq Meth : 82605

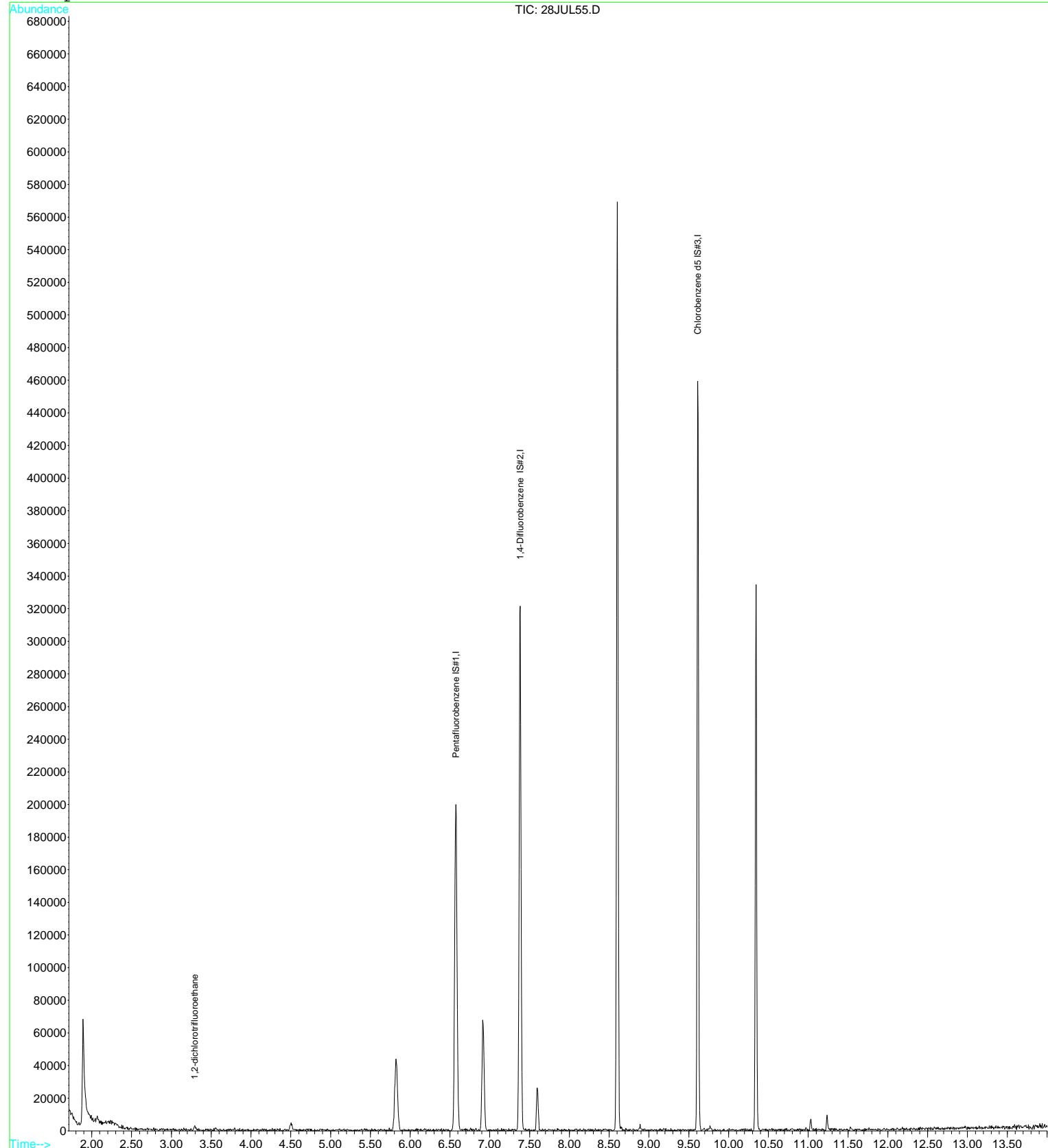
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----	-----	-----	-----	-----	-----	-----
1) Pentafluorobenzene IS#1	6.58	168	165950	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	242355	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	64429	10.00	ug/L	0.00

Target Compounds				Qvalue	
4) 1,2-dichlorotrifluoroethan	3.30	67	1852	0.17	ug/L # 85

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL55.D Vial: 55
Acq On : 29 Jul 2017 4:12 am Operator: MGC
Sample : 1720267-05 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:29 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL56.D Vial: 56
 Acq On : 29 Jul 2017 4:35 am Operator: MGC
 Sample : 1720267-06 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multipllr: 1.00
 MS Integration Params: rteint.p Quant Results File: 82605.RES
 Quant Time: Jul 29 9:22 2017

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	157773	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	230486	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	61476	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	47087	10.22	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	102.20%
31) Toluene d8 SMC#2	8.60	98	285274	10.02	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	100.20%
49) Bromofluorobenzene SMC#3	10.34	95	91167	9.93	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.30%

Target Compounds

				Qvalue
15) Cis-1,2-dichloroethene	5.82	96	8894	1.08 ug/L # 77
25) Trichloroethene	7.61	130	8359	1.06 ug/L # 87
63) 1,2-Dichlorobenzene	11.24	146	2682	0.20 ug/L # 97

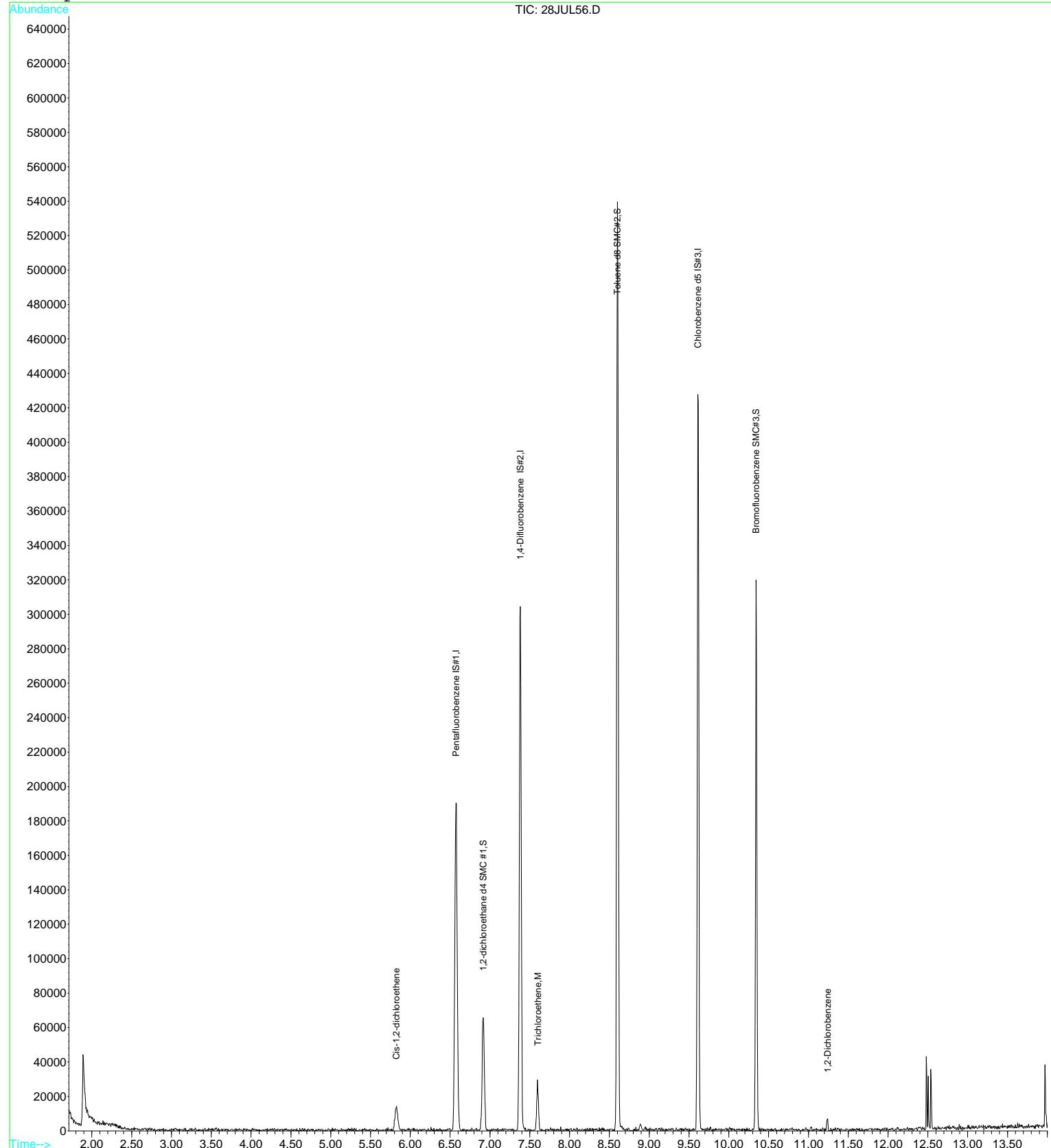
(#) = qualifier out of range (m) = manual integration

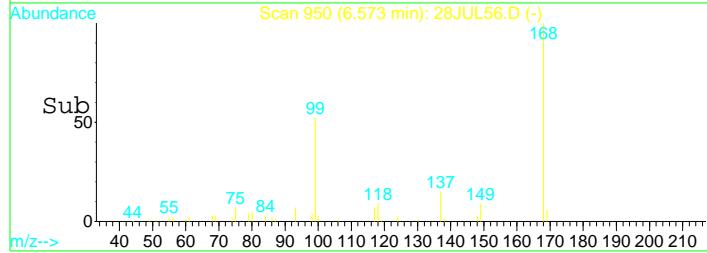
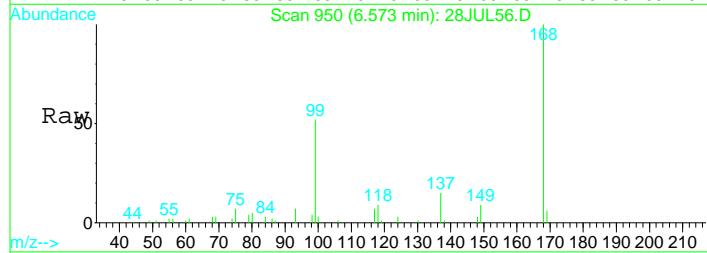
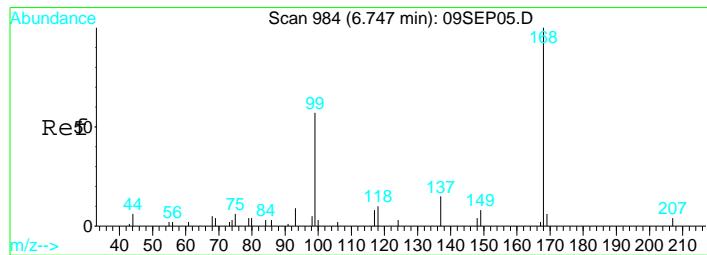
28JUL56.D 82605.M Sat Jul 29 09:26:13 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL56.D Vial: 56
 Acq On : 29 Jul 2017 4:35 am Operator: MGC
 Sample : 1720267-06 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:22 2017 Quant Results File: 82605.RES

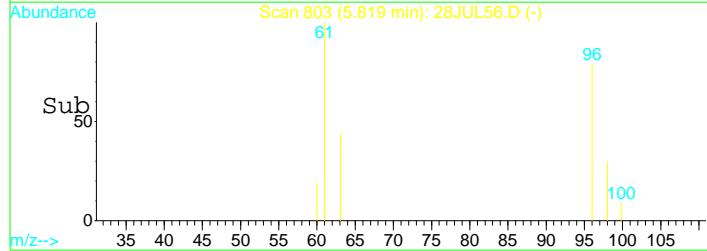
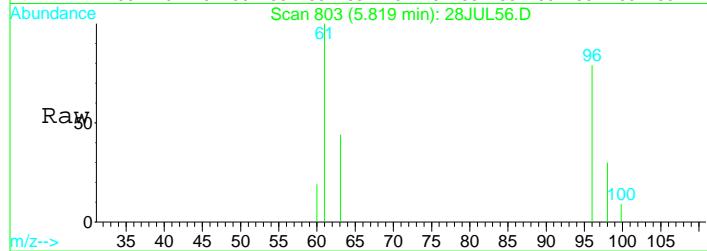
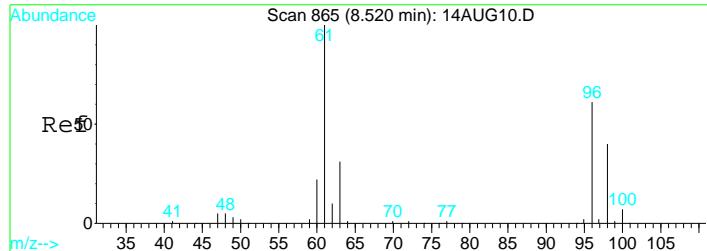
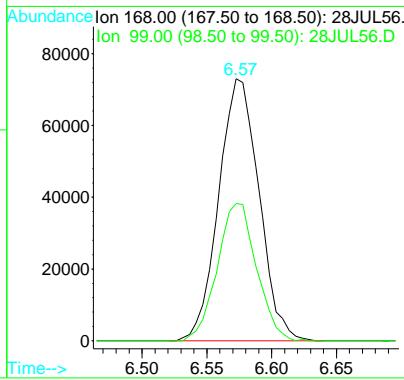
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration





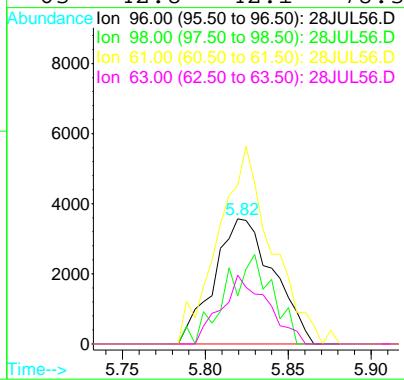
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 28JUL56.D
 Acq: 29 Jul 2017 4:35 am

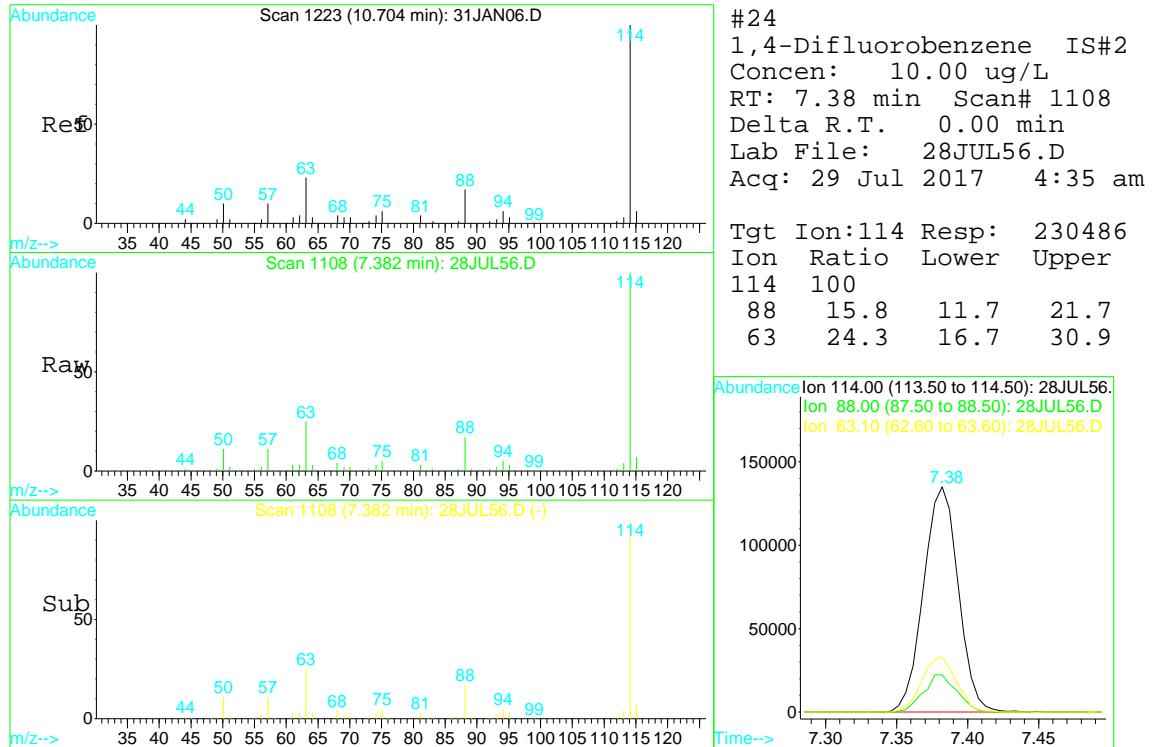
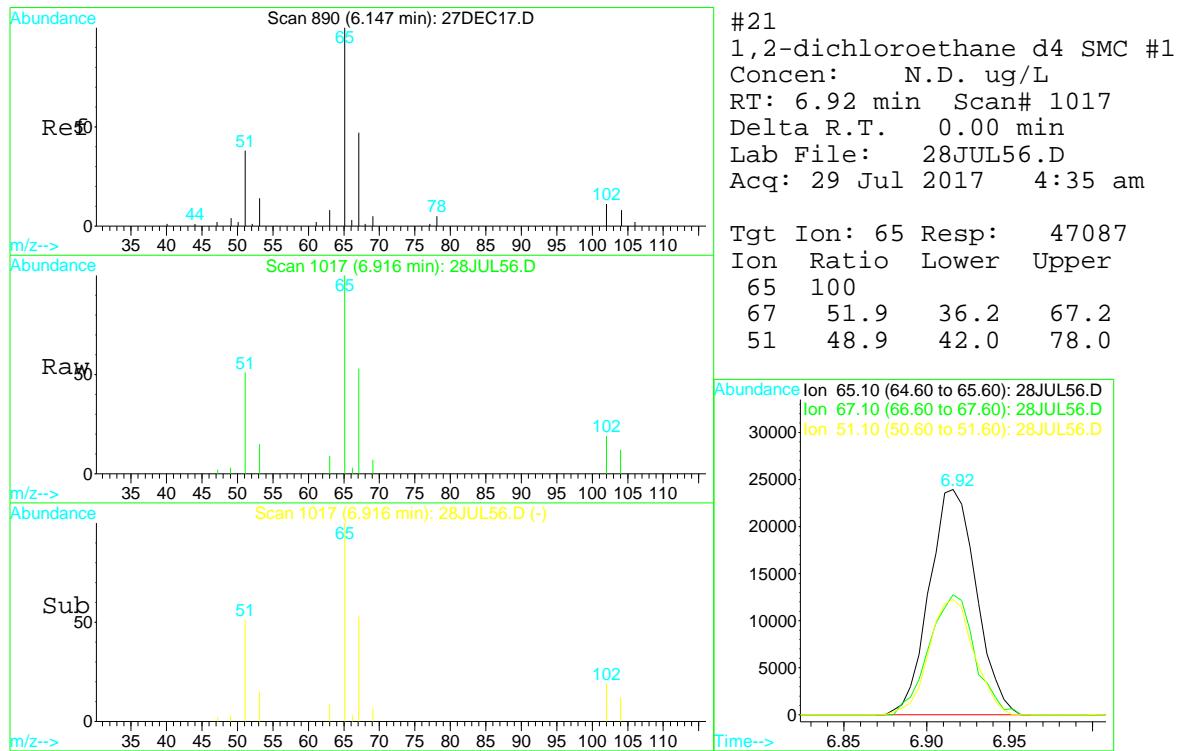
Tgt Ion: 168 Resp: 157773
 Ion Ratio Lower Upper
 168 100
 99 50.9 38.7 71.9

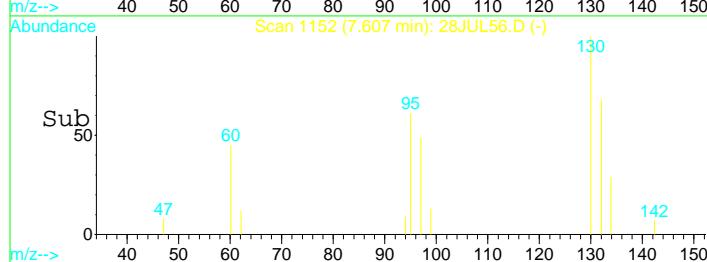
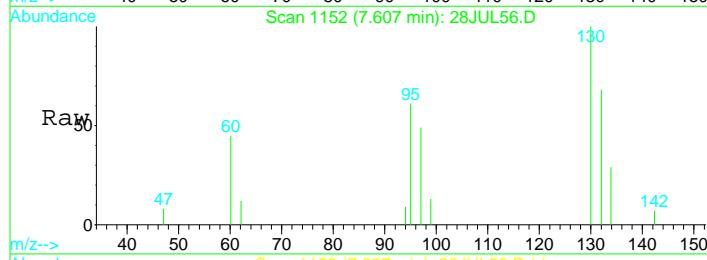
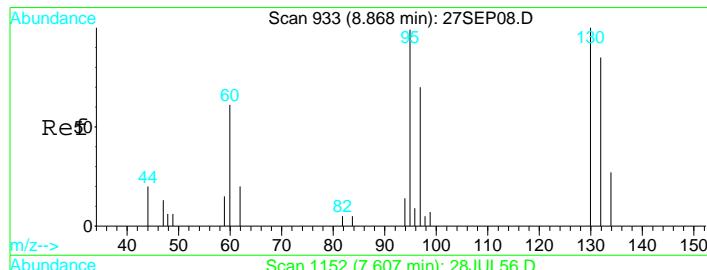


#15
 Cis-1,2-dichloroethene
 Concen: 1.08 ug/L
 RT: 5.82 min Scan# 803
 Delta R.T. -0.00 min
 Lab File: 28JUL56.D
 Acq: 29 Jul 2017 4:35 am

Tgt Ion: 96 Resp: 8894
 Ion Ratio Lower Upper
 96 100
 98 56.5 51.9 96.3
 61 143.2 122.8 228.0
 63 42.8 42.1 78.3



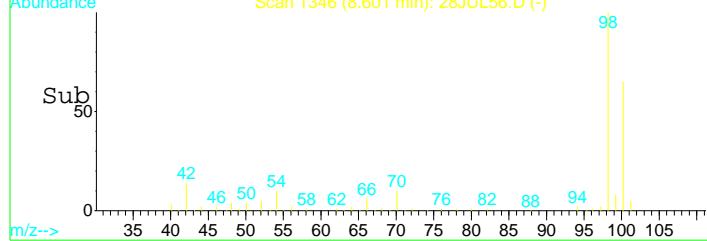
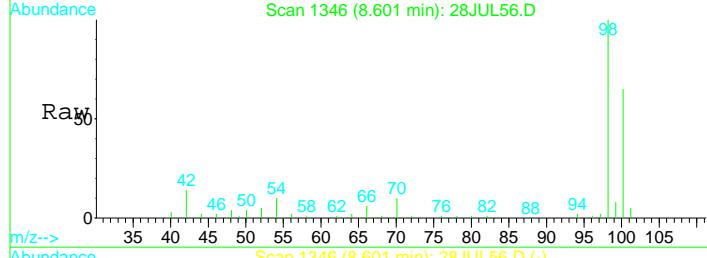
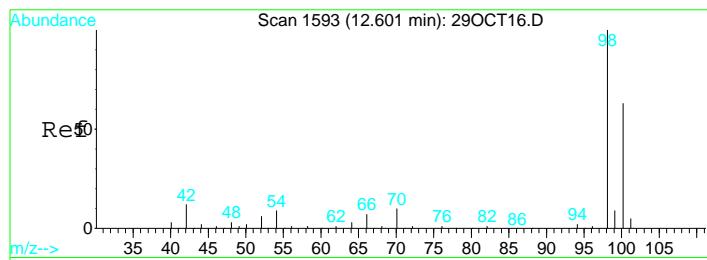
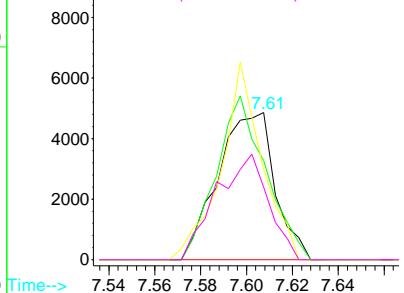




#25
Trichloroethene
Concen: 1.06 ug/L
RT: 7.61 min Scan# 1152
Delta R.T. 0.01 min
Lab File: 28JUL56.D
Acq: 29 Jul 2017 4:35 am

Tgt Ion: 130 Resp: 8359
Ion Ratio Lower Upper
130 100
132 95.7 66.1 122.7
95 96.6 86.1 159.9
97 65.9 52.8 98.0

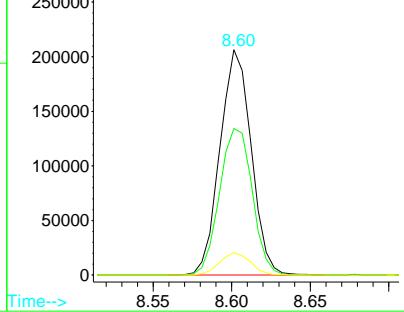
Abundance
Ion 129.90 (129.40 to 130.40): 28JUL56.
Ion 131.90 (131.40 to 132.40): 28JUL56.
Ion 95.00 (94.50 to 95.50): 28JUL56.D
Ion 97.00 (96.50 to 97.50): 28JUL56.D

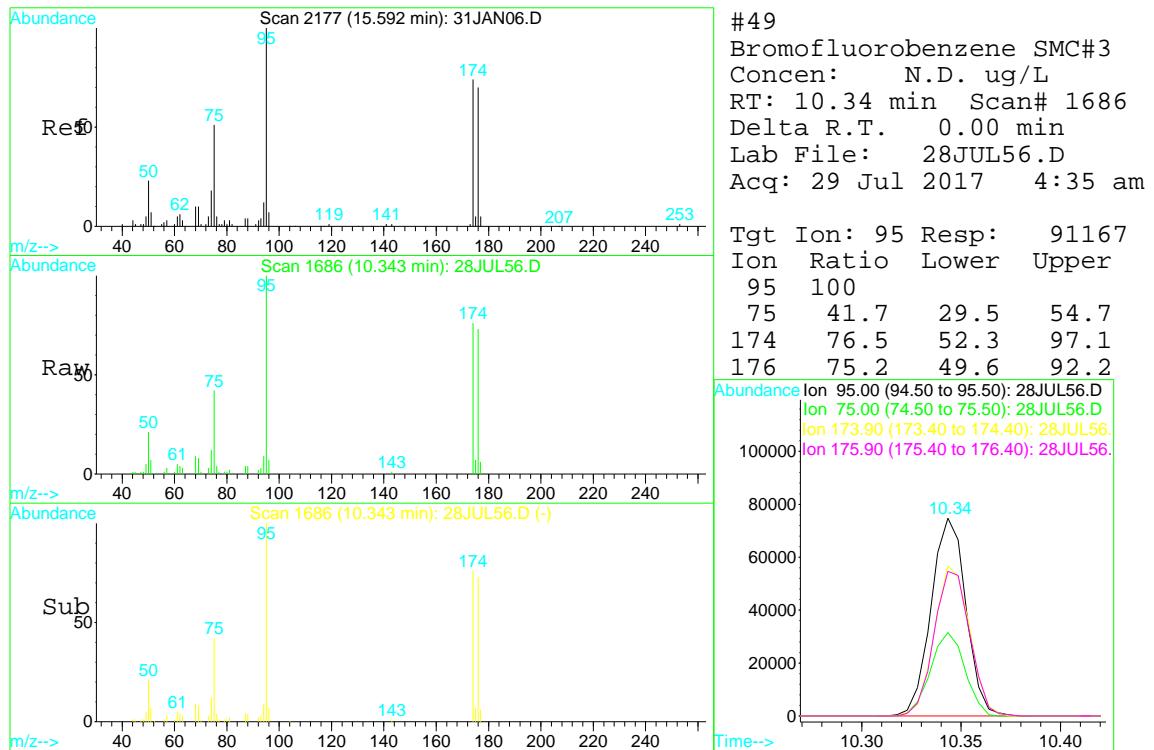
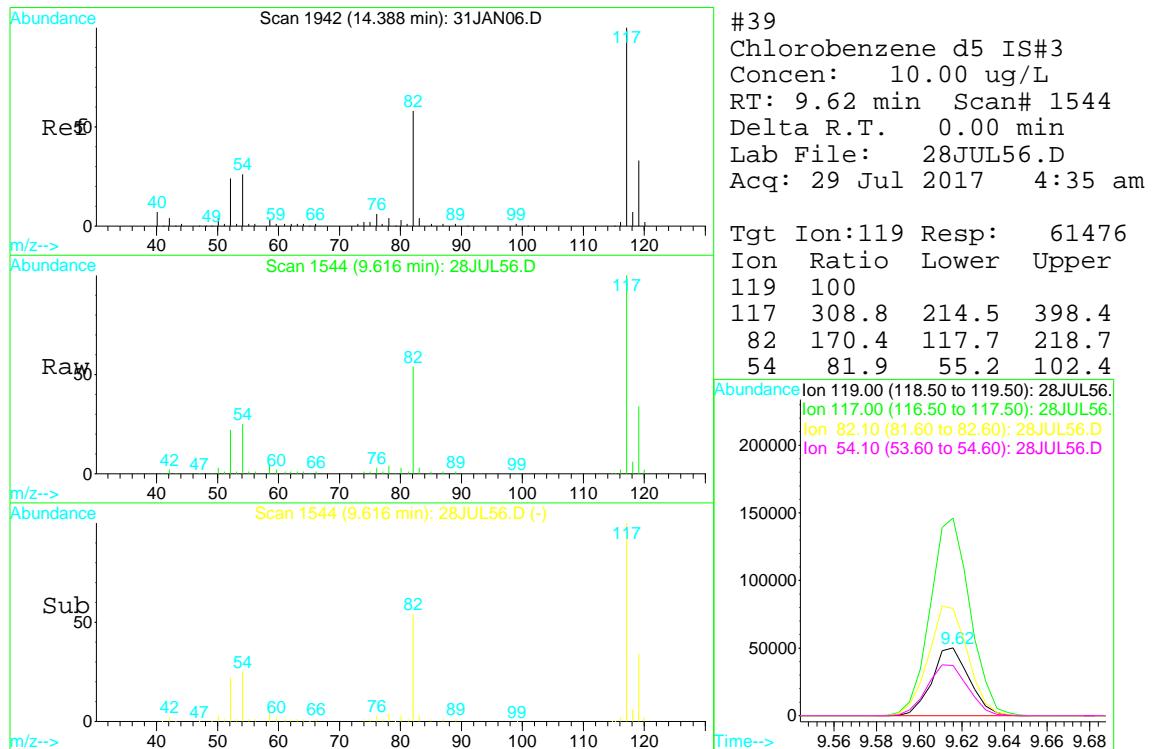


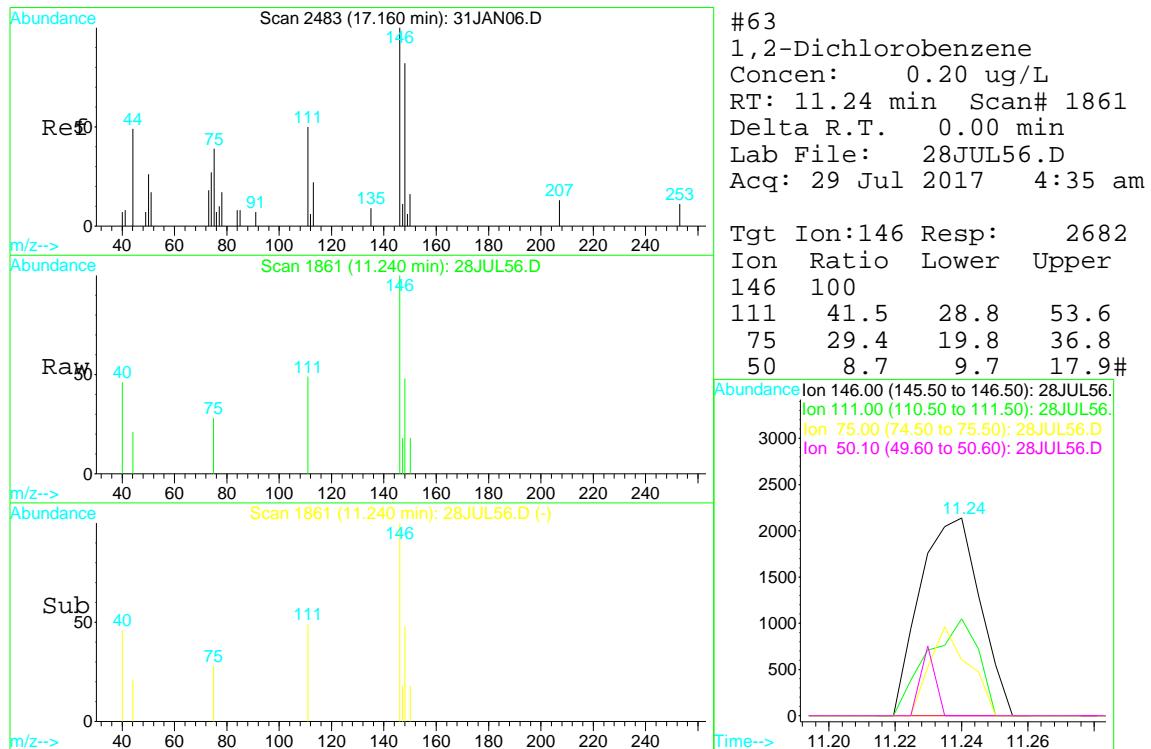
#31
Toluene d8 SMC#2
Concen: N.D. ug/L
RT: 8.60 min Scan# 1346
Delta R.T. 0.00 min
Lab File: 28JUL56.D
Acq: 29 Jul 2017 4:35 am

Tgt Ion: 98 Resp: 285274
Ion Ratio Lower Upper
98 100
100 68.1 49.7 92.3
70 9.9 7.3 13.7

Abundance
Ion 98.10 (97.60 to 98.60): 28JUL56.D
Ion 100.10 (99.60 to 100.60): 28JUL56.D
Ion 70.10 (69.60 to 70.60): 28JUL56.D







Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL56.D Vial: 56
Acq On : 29 Jul 2017 4:35 am Operator: MGC
Sample : 1720267-06 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:29 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration
DataAcq Meth : 82605

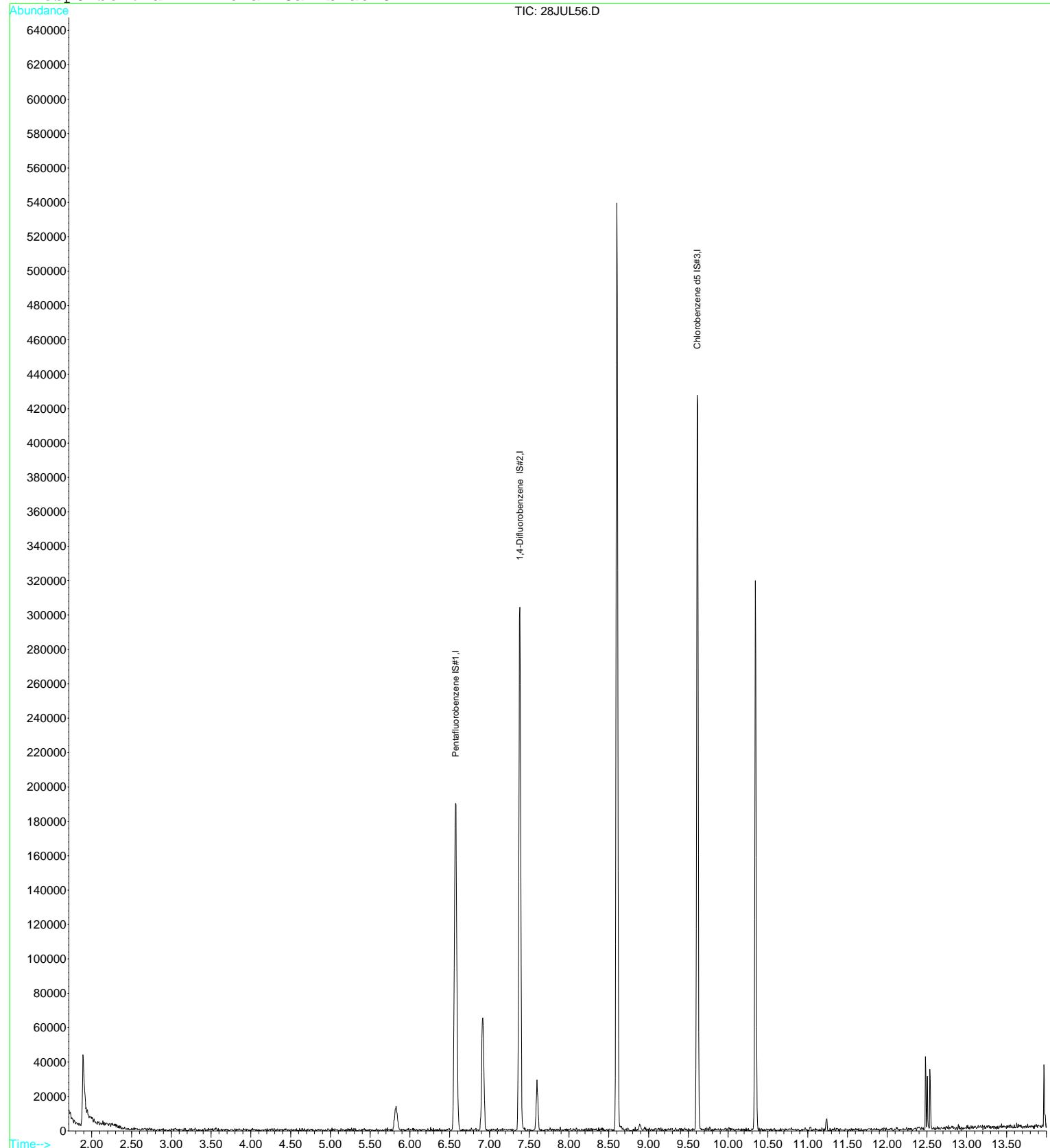
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----	-----	-----	-----	-----	-----	-----
1) Pentafluorobenzene IS#1	6.57	168	157773	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	230486	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	61476	10.00	ug/L	0.00

Target Compounds	Qvalue
-----	-----

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL56.D Vial: 56
Acq On : 29 Jul 2017 4:35 am Operator: MGC
Sample : 1720267-06 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:29 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL57.D Vial: 57
 Acq On : 29 Jul 2017 4:58 am Operator: MGC
 Sample : 1720267-07 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multipllr: 1.00

MS Integration Params: rteint.p
 Quant Time: Jul 29 9:23 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	156138	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	229047	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	58613	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	46343	10.16	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	101.60%
31) Toluene d8 SMC#2	8.60	98	273464	9.67	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.70%
49) Bromofluorobenzene SMC#3	10.34	95	87029	9.94	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.40%

Target Compounds

					Qvalue
4) Vinyl chloride	2.07	62	62355	5.33	ug/L
12) T-1,2-dichloroethene	4.50	96	12851	1.64	ug/L
15) Cis-1,2-dichloroethene	5.83	96	32660	4.01	ug/L
23) Benzene	6.94	78	15765	0.49	ug/L
25) Trichloroethene	7.60	130	4187	0.53	ug/L
32) Toluene	8.65	92	1986	0.10	ug/L #
40) Chlorobenzene	9.63	112	993318	51.10	ug/L
42) Ethylbenzene	9.69	106	890	0.08	ug/L
47) Isopropylbenzene	10.22	105	2071	0.06	ug/L #
58) sec-butylbenzene	10.88	105	2360	0.06	ug/L
60) 1,3-Dichlorobenzene	10.98	146	2663m	0.18	ug/L
61) 1,4-Dichlorobenzene	11.03	146	18311	1.28	ug/L
63) 1,2-Dichlorobenzene	11.24	146	73890	5.85	ug/L #

(#) = qualifier out of range (m) = manual integration

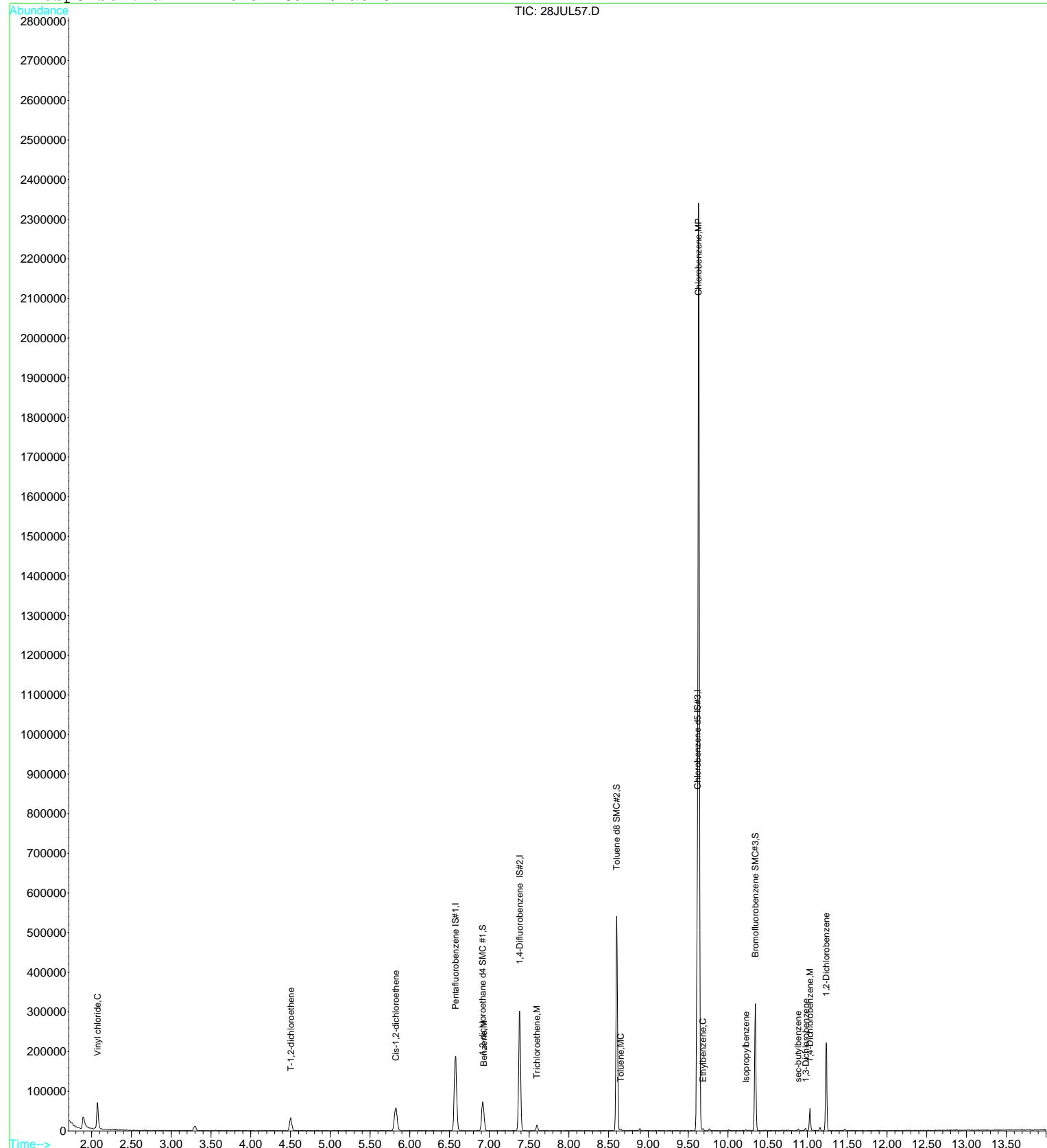
28JUL57.D 82605.M Sat Jul 29 09:26:14 2017

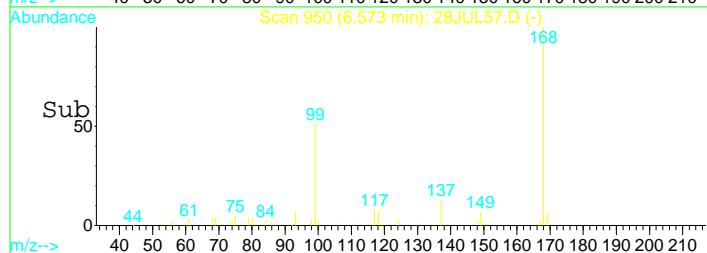
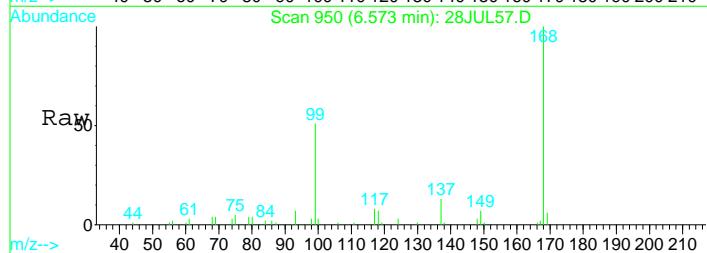
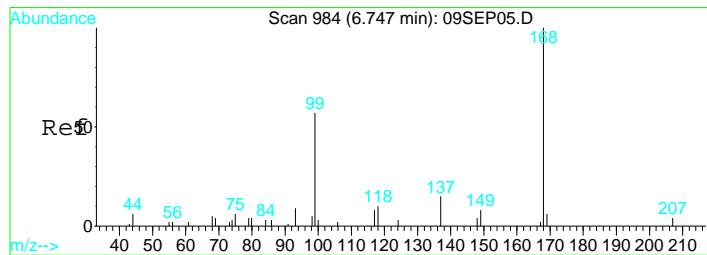
Page 1

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL57.D Vial: 57
 Acq On : 29 Jul 2017 4:58 am Operator: MGC
 Sample : 1720267-07 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:23 2017 Quant Results File: 82605.RES

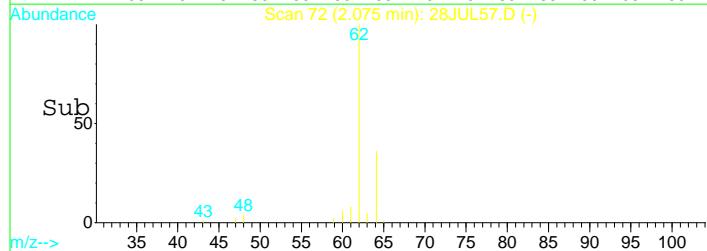
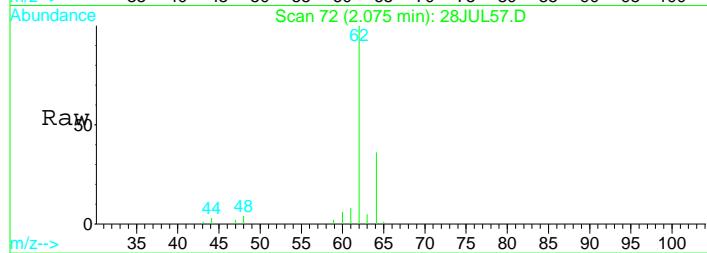
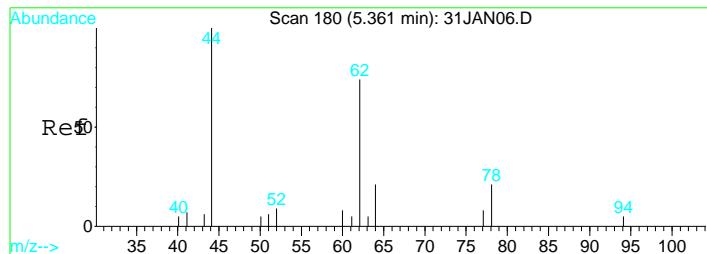
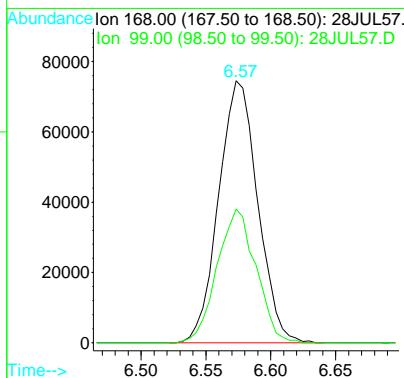
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration





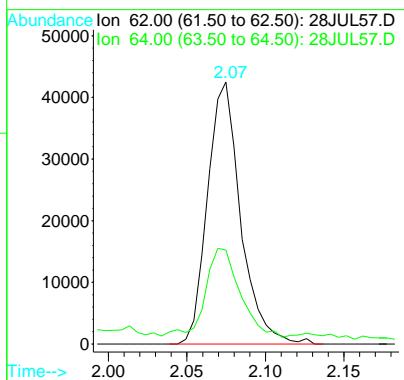
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 28JUL57.D
 Acq: 29 Jul 2017 4:58 am

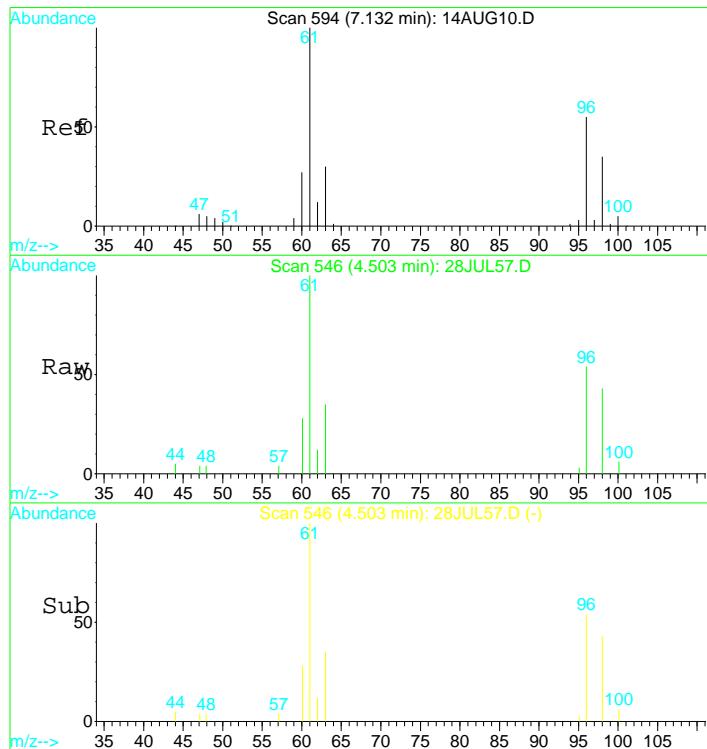
Tgt Ion: 168 Resp: 156138
 Ion Ratio Lower Upper
 168 100
 99 50.6 38.7 71.9



#4
 Vinyl chloride
 Concen: 5.33 ug/L
 RT: 2.07 min Scan# 72
 Delta R.T. 0.00 min
 Lab File: 28JUL57.D
 Acq: 29 Jul 2017 4:58 am

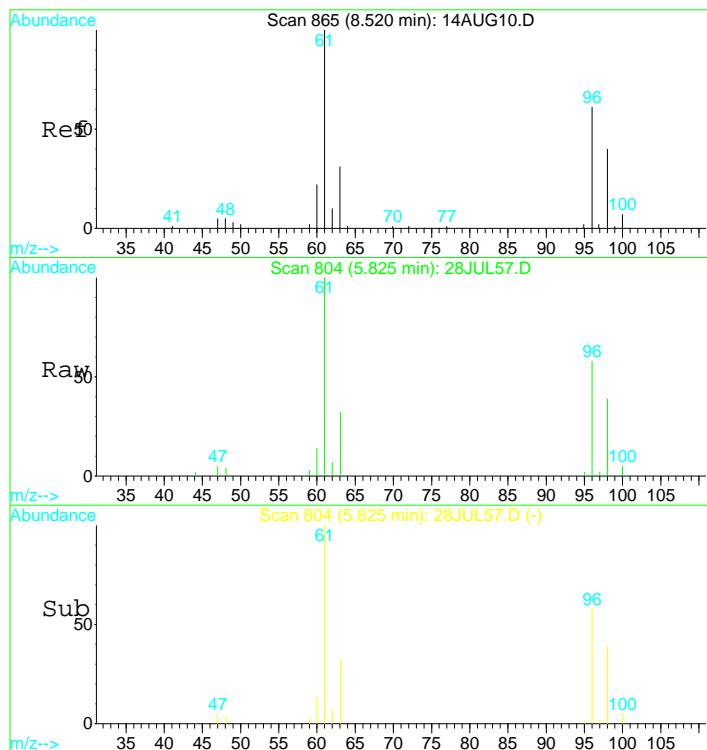
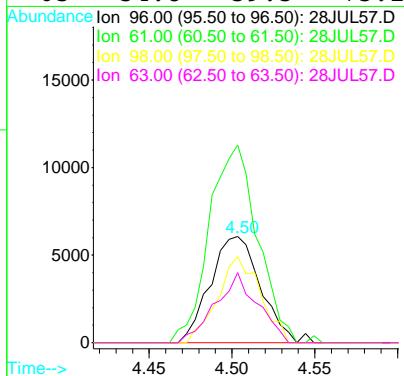
Tgt Ion: 62 Resp: 62355
 Ion Ratio Lower Upper
 62 100
 64 42.1 39.3 72.9





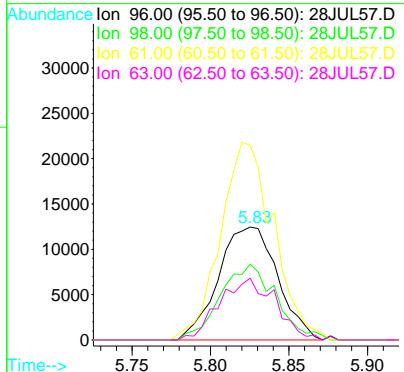
#12
 T-1,2-dichloroethene
 Concen: 1.64 ug/L
 RT: 4.50 min Scan# 546
 Delta R.T. 0.00 min
 Lab File: 28JUL57.D
 Acq: 29 Jul 2017 4:58 am

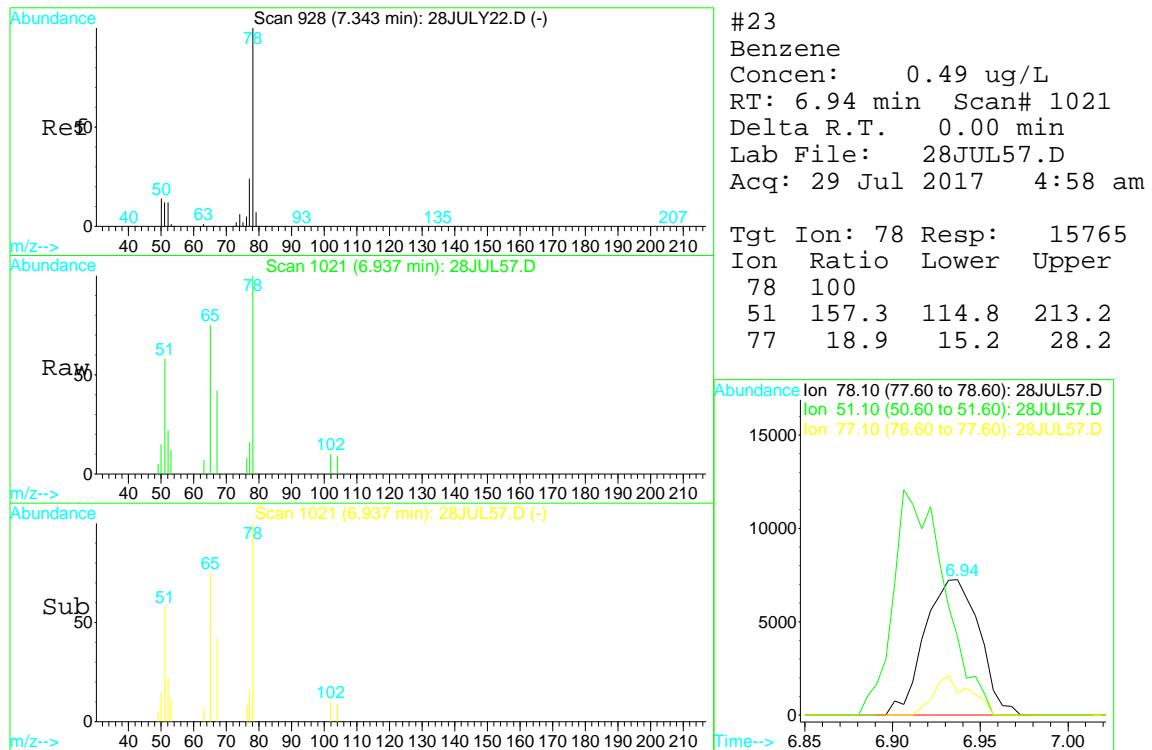
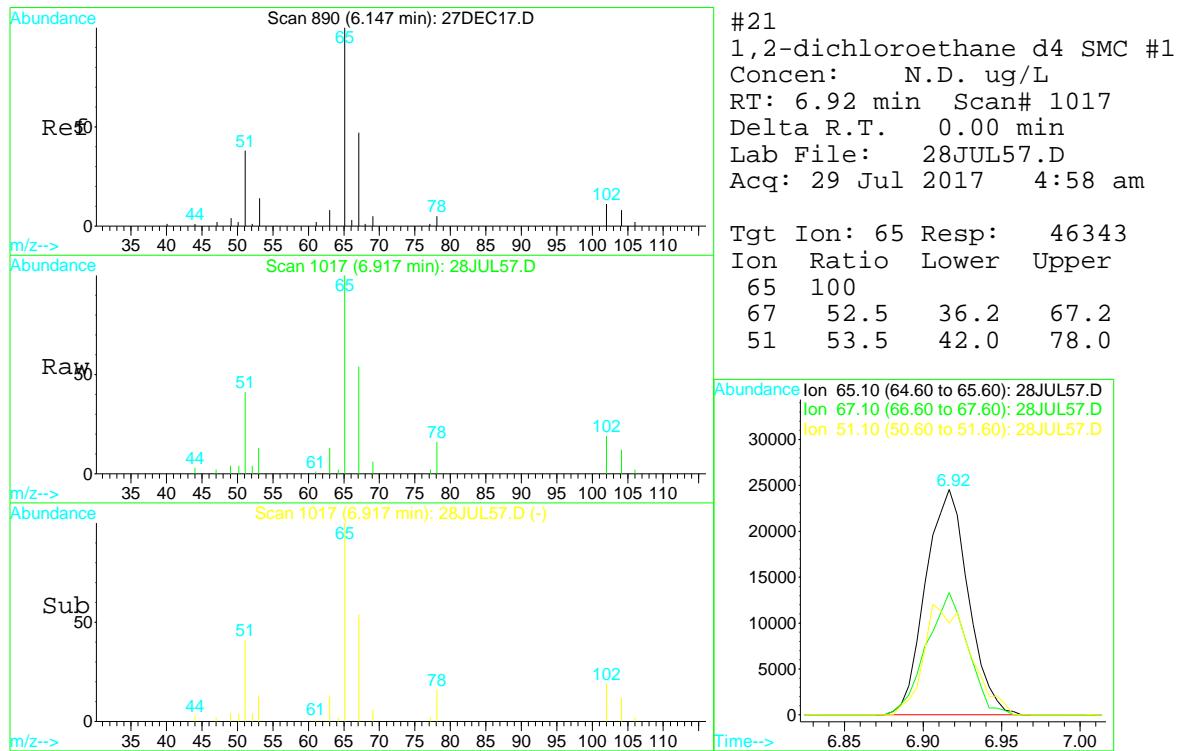
Tgt Ion: 96 Resp: 12851
 Ion Ratio Lower Upper
 96 100
 61 177.6 129.4 240.4
 98 68.2 41.5 77.1
 63 54.8 39.3 73.1

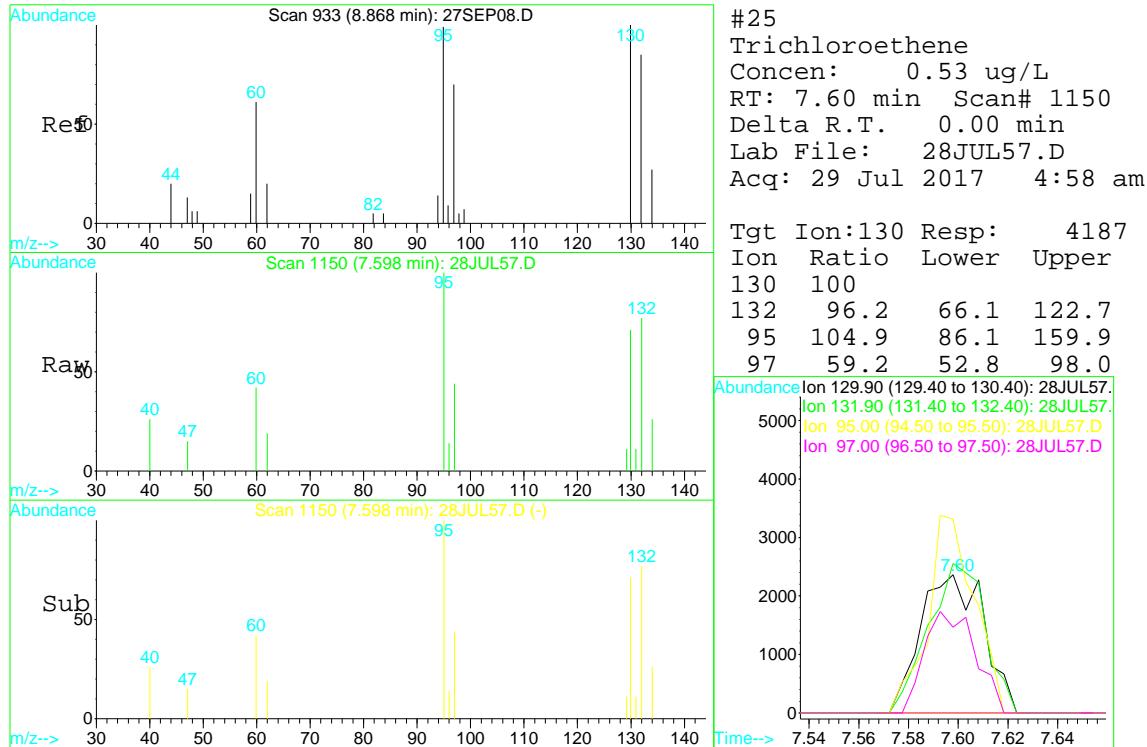
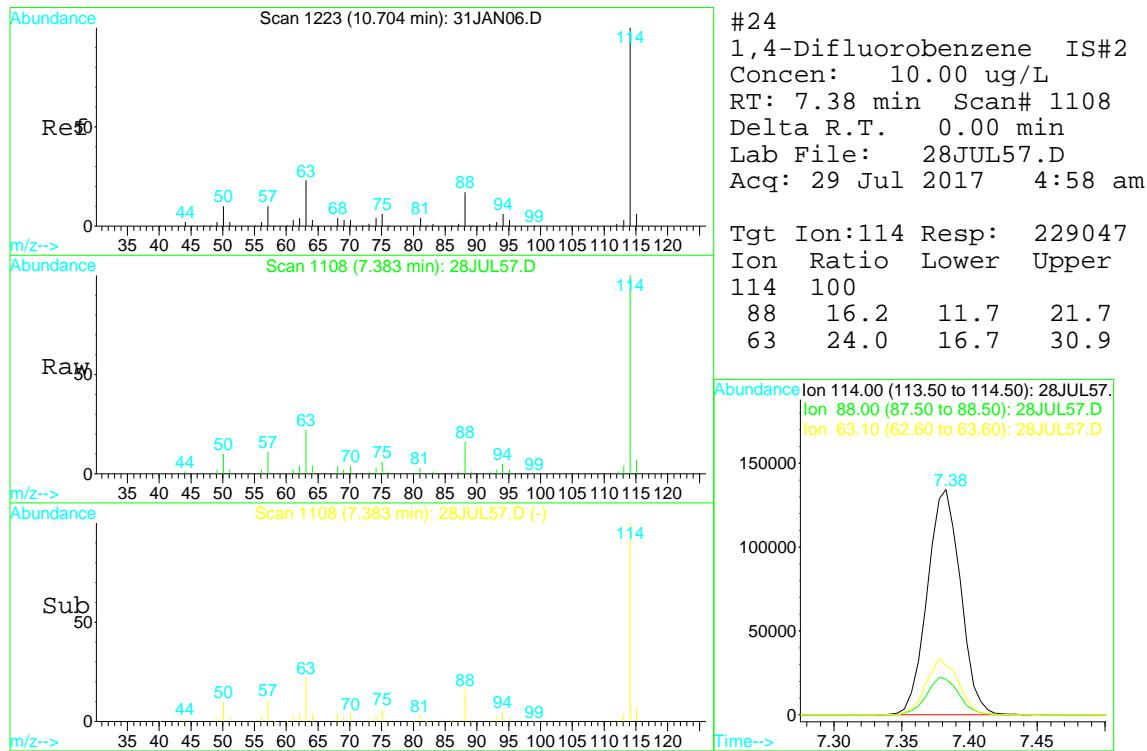


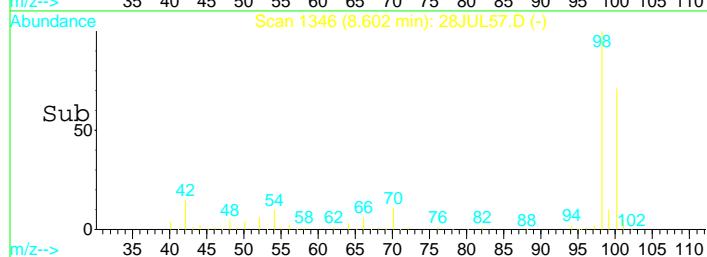
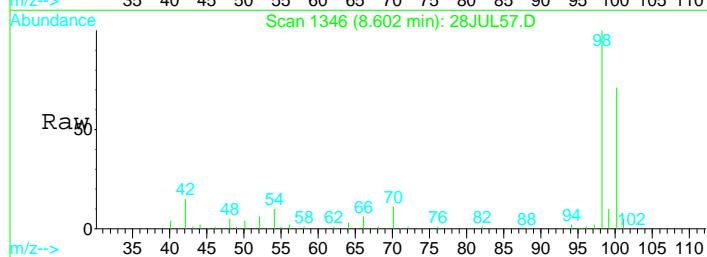
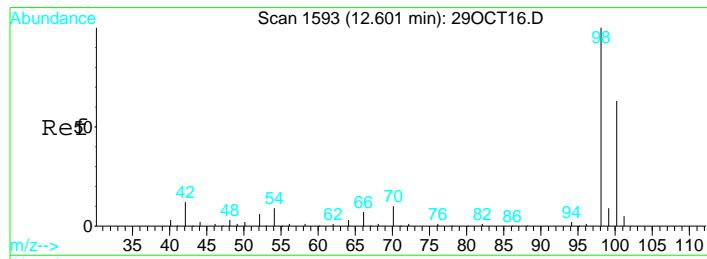
#15
 Cis-1,2-dichloroethene
 Concen: 4.01 ug/L
 RT: 5.83 min Scan# 804
 Delta R.T. 0.00 min
 Lab File: 28JUL57.D
 Acq: 29 Jul 2017 4:58 am

Tgt Ion: 96 Resp: 32660
 Ion Ratio Lower Upper
 96 100
 98 63.1 51.9 96.3
 61 156.4 122.8 228.0
 63 52.1 42.1 78.3



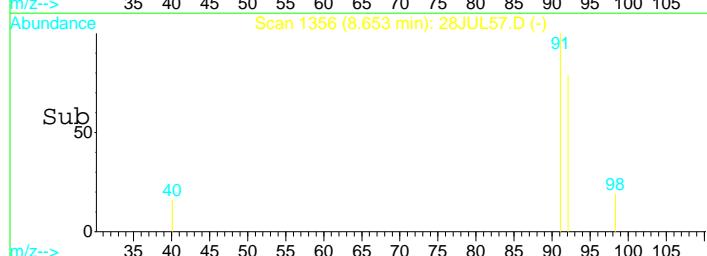
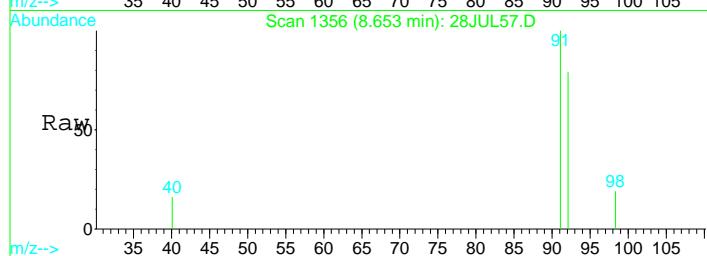
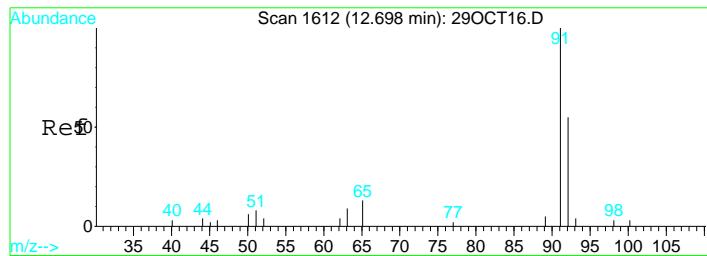
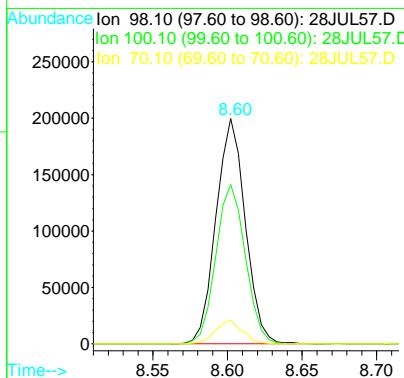






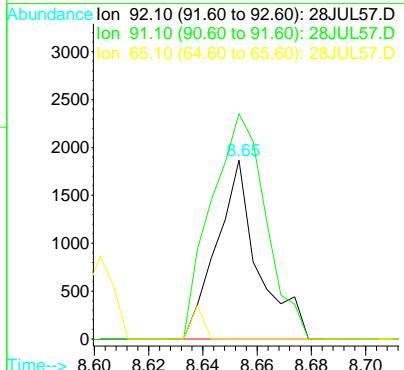
#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. 0.00 min
 Lab File: 28JUL57.D
 Acq: 29 Jul 2017 4:58 am

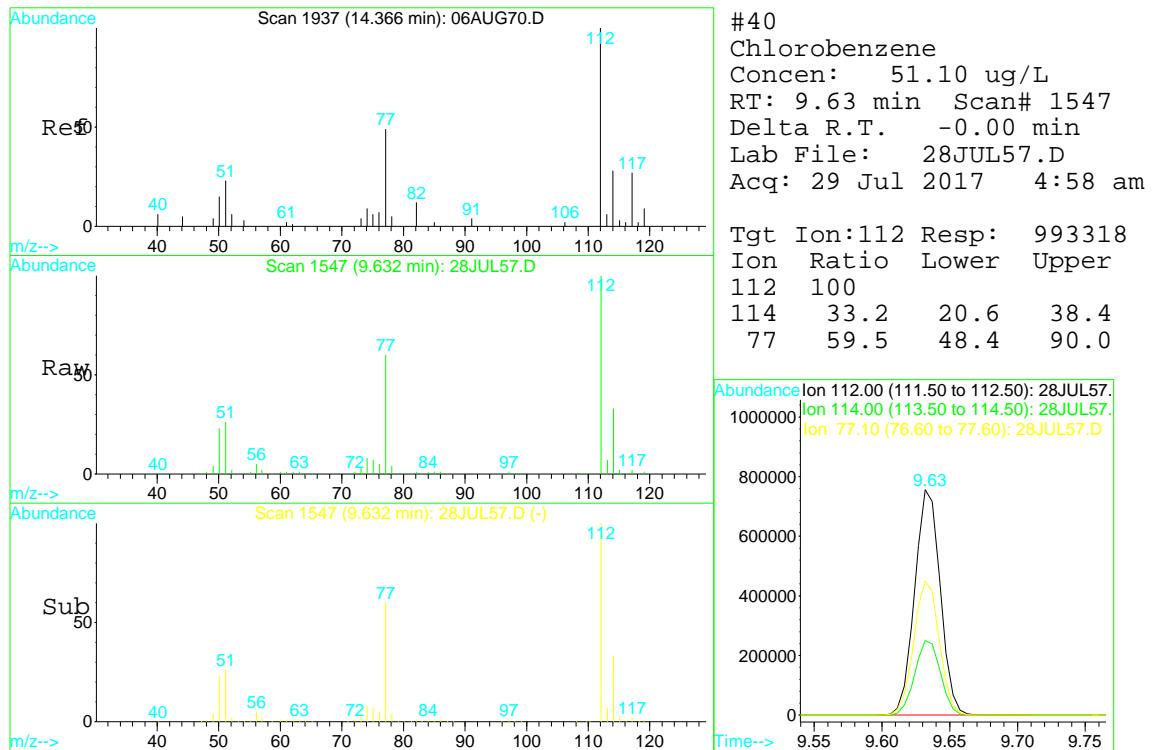
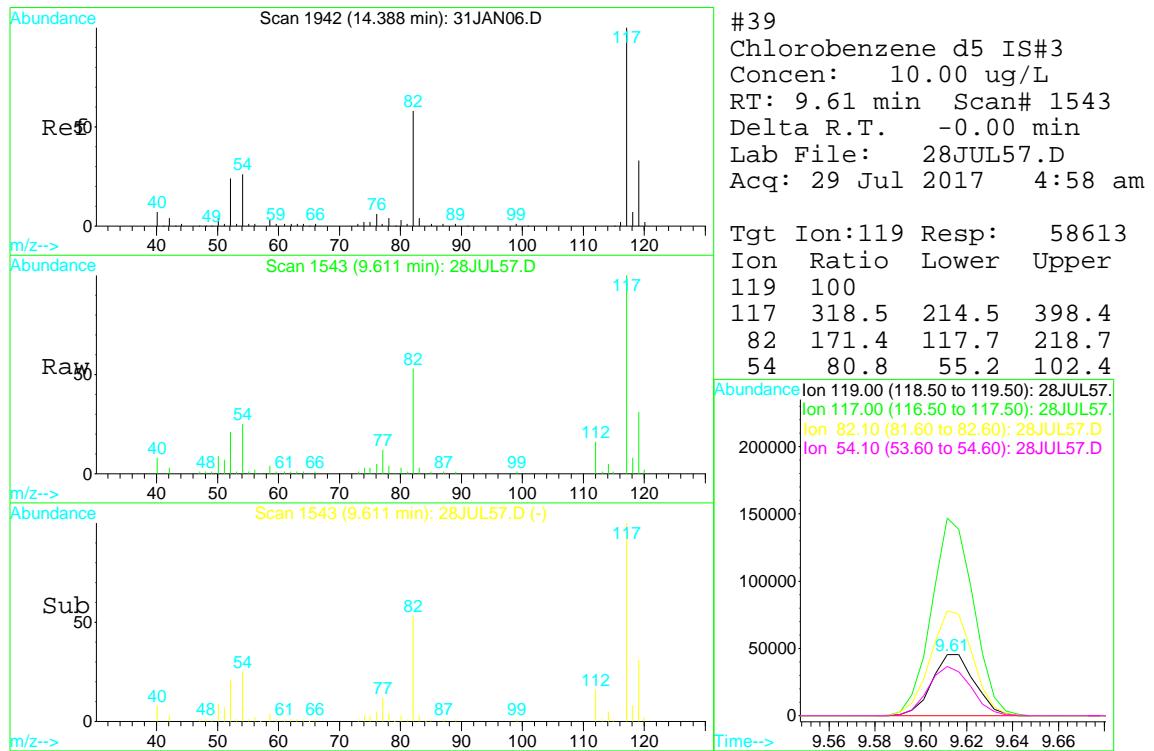
Tgt Ion: 98 Resp: 273464
 Ion Ratio Lower Upper
 98 100
 100 71.0 49.7 92.3
 70 9.7 7.3 13.7

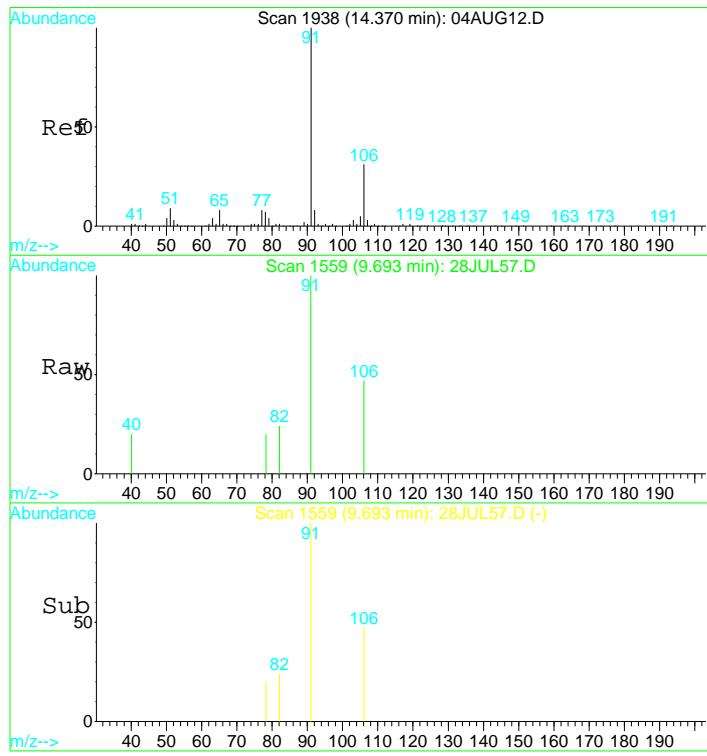


#32
 Toluene
 Concen: 0.10 ug/L
 RT: 8.65 min Scan# 1356
 Delta R.T. 0.00 min
 Lab File: 28JUL57.D
 Acq: 29 Jul 2017 4:58 am

Tgt Ion: 92 Resp: 1986
 Ion Ratio Lower Upper
 92 100
 91 165.8 122.6 227.6
 65 5.4 16.5 30.7#

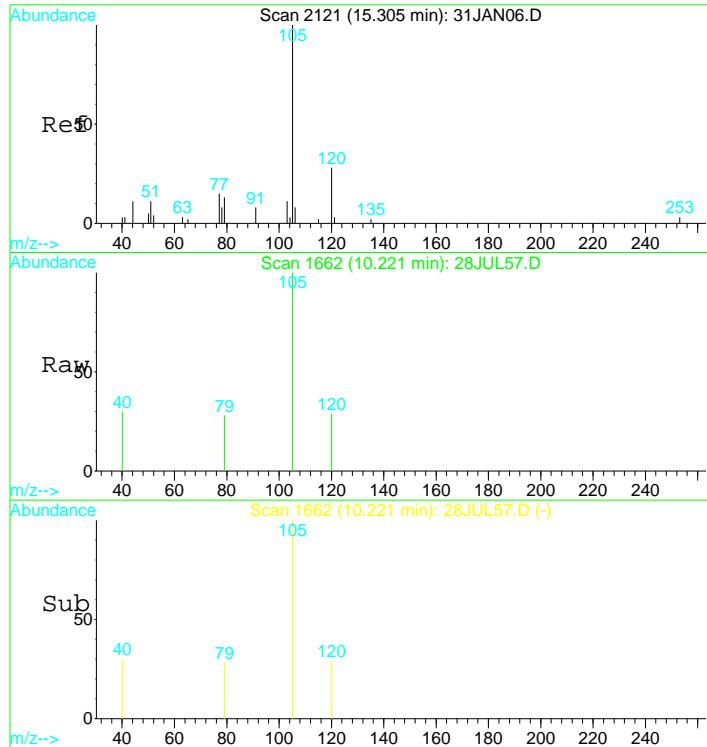
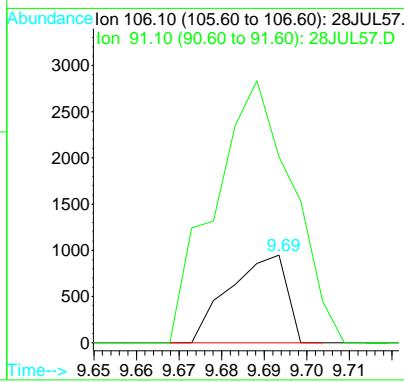






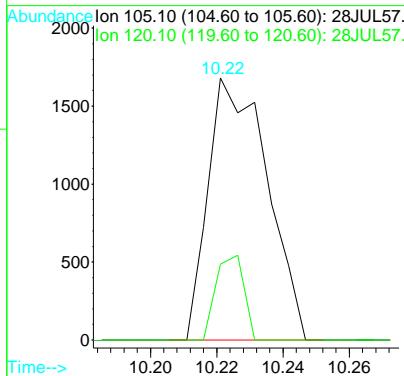
#42
Ethylbenzene
 Concen: 0.08 ug/L
 RT: 9.69 min Scan# 1559
 Delta R.T. 0.01 min
 Lab File: 28JUL57.D
 Acq: 29 Jul 2017 4:58 am

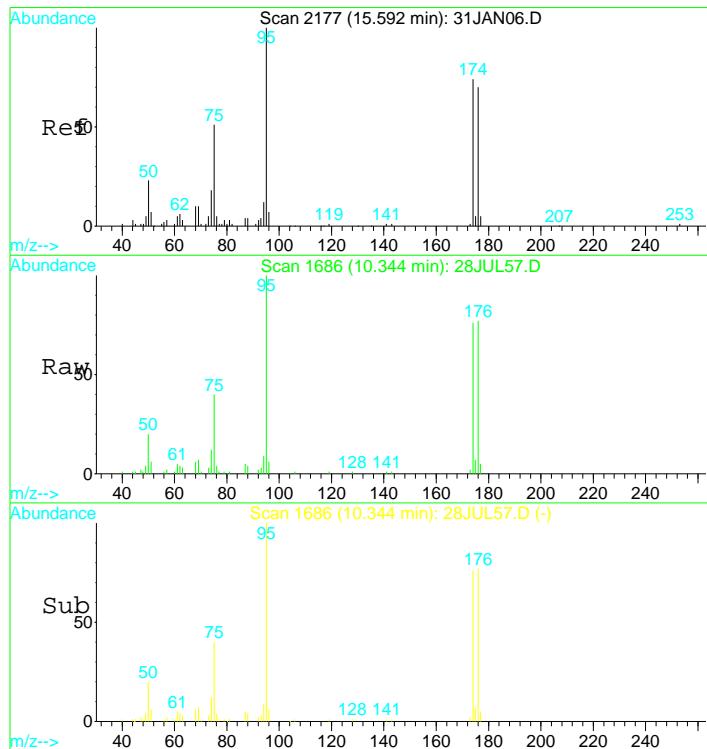
Tgt Ion:106 Resp: 890
 Ion Ratio Lower Upper
 106 100
 91 405.5 241.5 448.5



#47
Isopropylbenzene
 Concen: 0.06 ug/L
 RT: 10.22 min Scan# 1662
 Delta R.T. -0.01 min
 Lab File: 28JUL57.D
 Acq: 29 Jul 2017 4:58 am

Tgt Ion:105 Resp: 2071
 Ion Ratio Lower Upper
 105 100
 120 15.3 19.2 35.6#

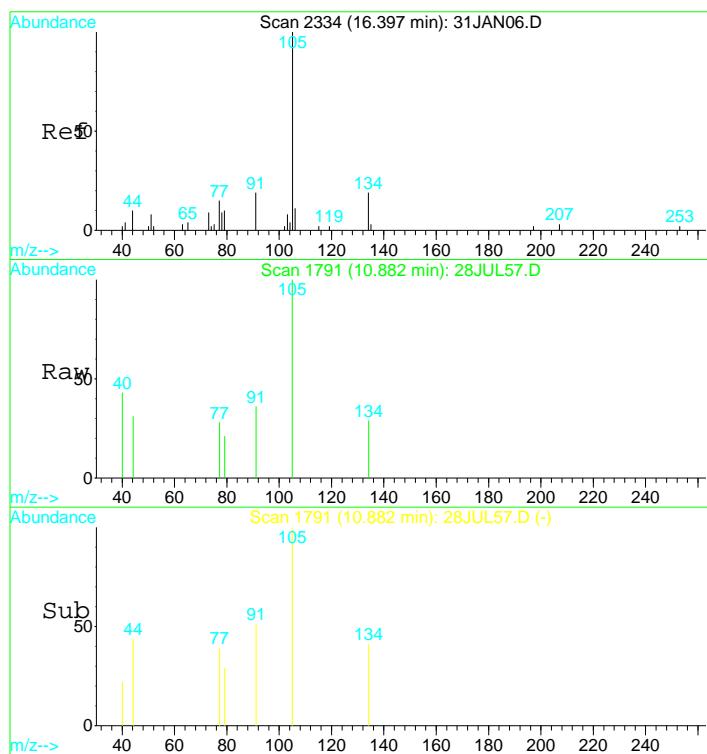
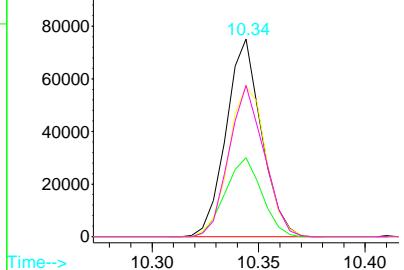




#49
 Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.34 min Scan# 1686
 Delta R.T. 0.00 min
 Lab File: 28JUL57.D
 Acq: 29 Jul 2017 4:58 am

Tgt Ion: 95 Resp: 87029
 Ion Ratio Lower Upper
 95 100
 75 41.2 29.5 54.7
 174 79.9 52.3 97.1
 176 75.8 49.6 92.2

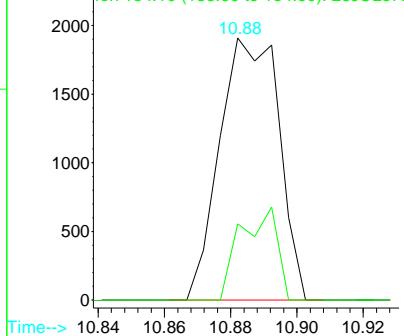
Abundance
 Ion 95.00 (94.50 to 95.50): 28JUL57.D
 Ion 75.00 (74.50 to 75.50): 28JUL57.D
 Ion 173.90 (173.40 to 174.40): 28JUL57.D
 Ion 175.90 (175.40 to 176.40): 28JUL57.D

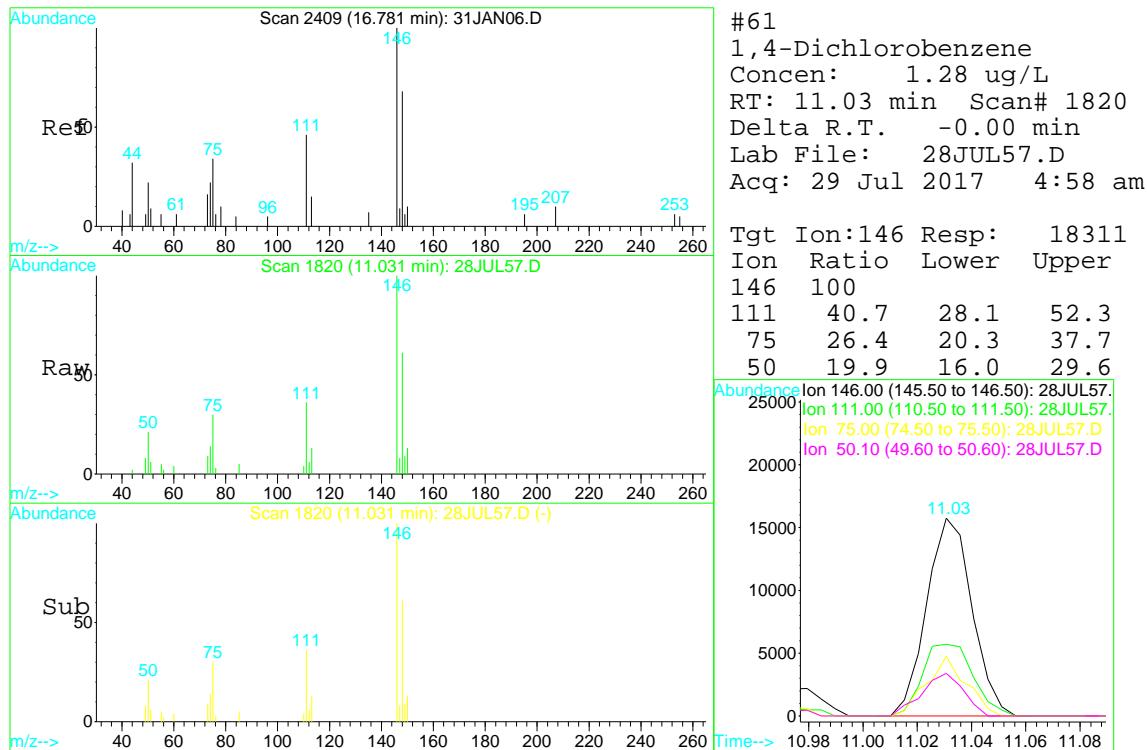
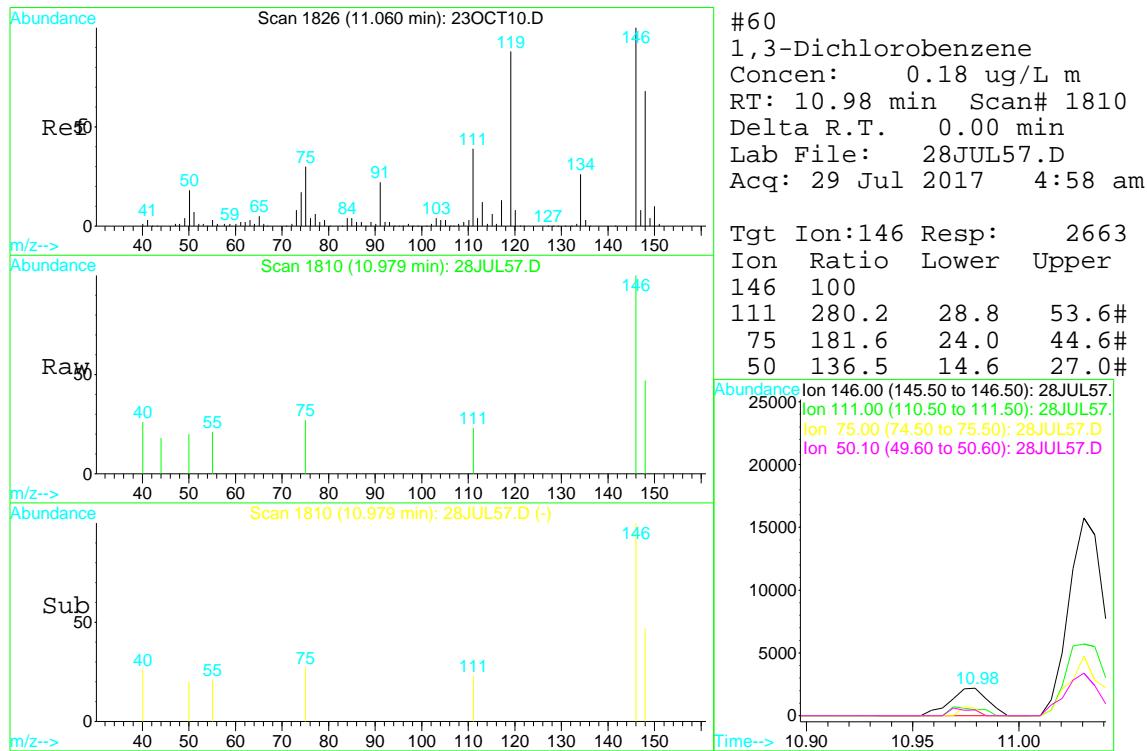


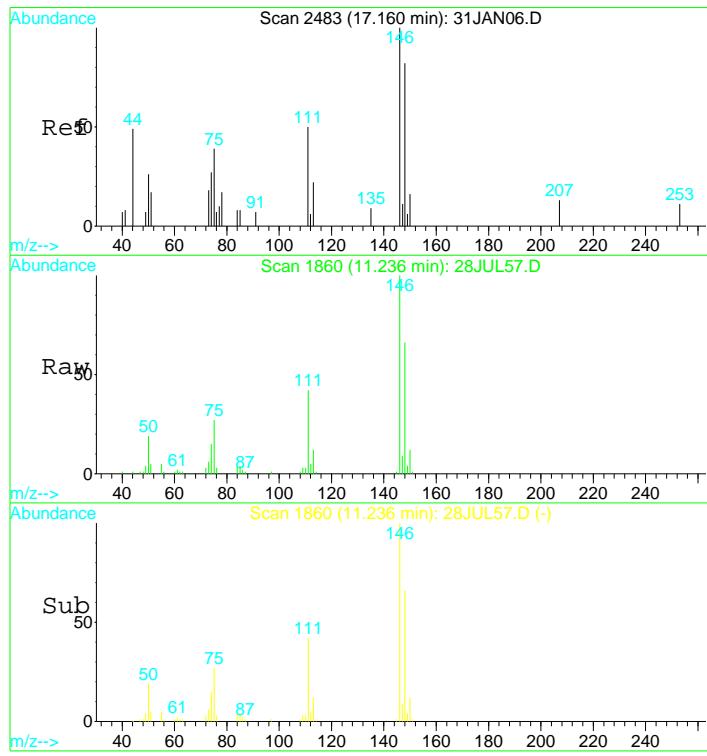
#58
 sec-butylbenzene
 Concen: 0.06 ug/L
 RT: 10.88 min Scan# 1791
 Delta R.T. -0.00 min
 Lab File: 28JUL57.D
 Acq: 29 Jul 2017 4:58 am

Tgt Ion: 105 Resp: 2360
 Ion Ratio Lower Upper
 105 100
 134 22.1 14.4 26.7

Abundance
 Ion 105.10 (104.60 to 105.60): 28JUL57.D
 Ion 134.10 (133.60 to 134.60): 28JUL57.D





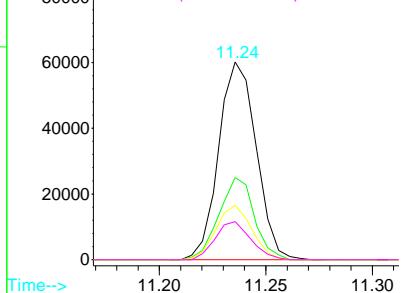


#63
 1, 2-Dichlorobenzene
 Concen: 5.85 ug/L
 RT: 11.24 min Scan# 1860
 Delta R.T. -0.00 min
 Lab File: 28JUL57.D
 Acq: 29 Jul 2017 4:58 am

Tgt Ion:146 Resp: 73890

Ion	Ratio	Lower	Upper
146	100		
111	39.1	28.8	53.6
75	26.2	19.8	36.8
50	18.3	9.7	17.9

Abundance Ion 146.00 (145.50 to 146.50): 28JUL57.
 Ion 111.00 (110.50 to 111.50): 28JUL57.
 Ion 75.00 (74.50 to 75.50): 28JUL57.D
 Ion 50.10 (49.60 to 50.60): 28JUL57.D



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL57.D Vial: 57
Acq On : 29 Jul 2017 4:58 am Operator: MGC
Sample : 1720267-07 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00

MS Integration Params: rteint.p
Quant Time: Jul 29 9:29 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)

Title : EPA Method 624/8260

Last Update : Fri Jul 21 04:19:15 2017

Response via : Initial Calibration

DataAcq Meth : 82605

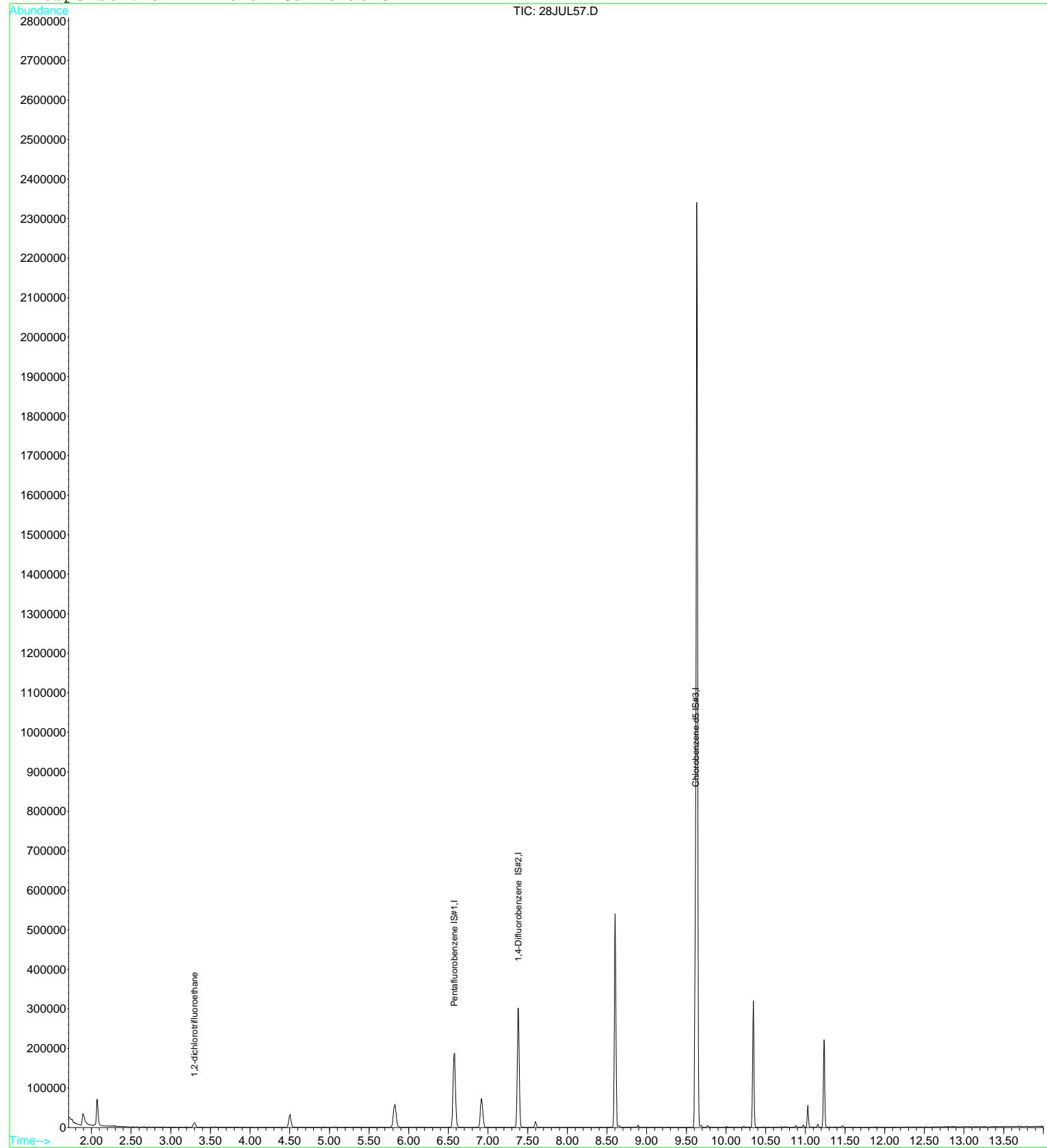
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	156138	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	229047	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	58613	10.00	ug/L	0.00

Target Compounds				Qvalue
4) 1,2-dichlorotrifluoroethan	3.29	67	8098	0.79 ug/L # 80

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL57.D Vial: 57
Acq On : 29 Jul 2017 4:58 am Operator: MGC
Sample : 1720267-07 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:29 2017 Quant Results File: 82605X.RES

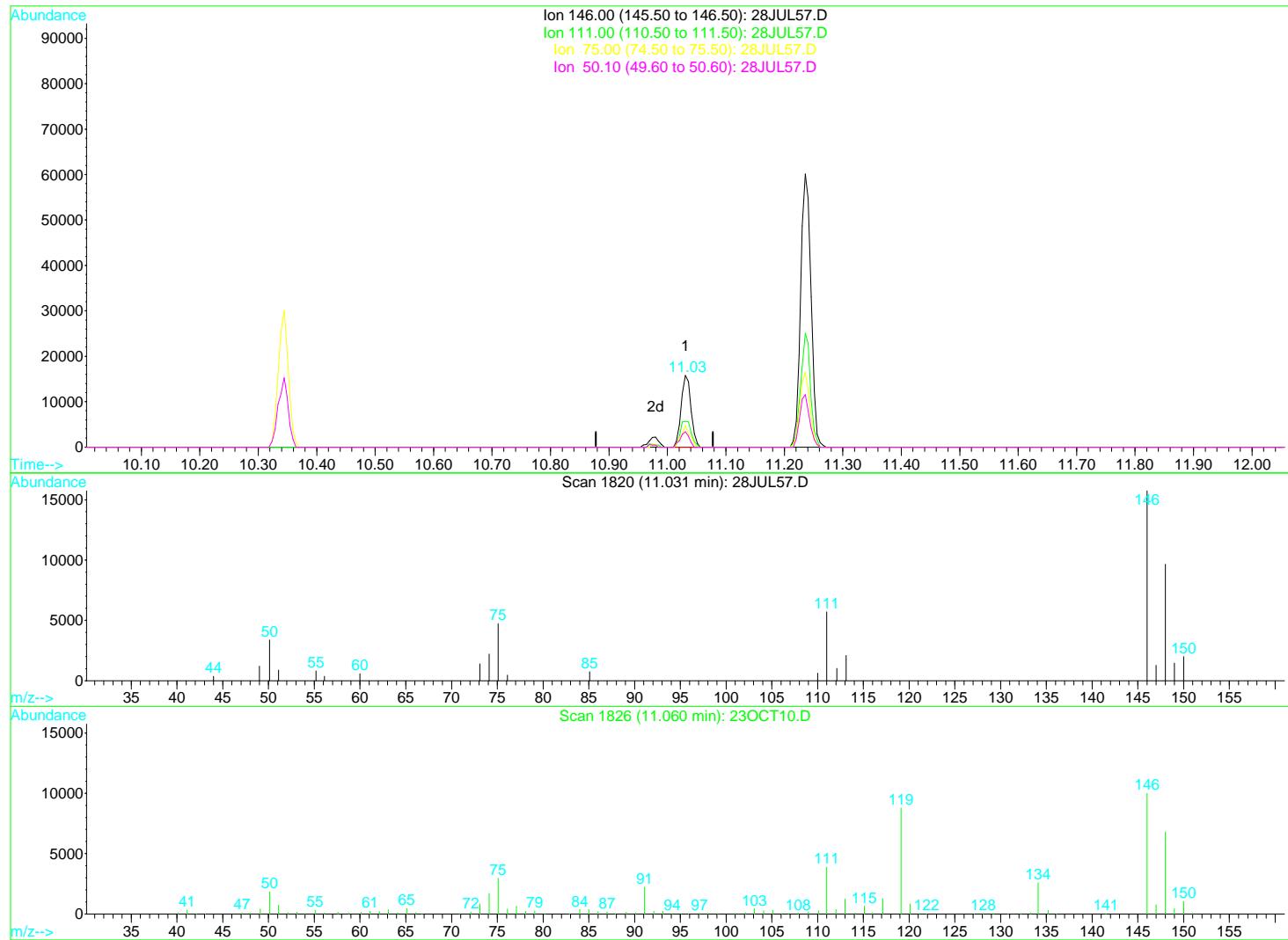
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL57.D Vial: 57
 Acq On : 29 Jul 2017 4:58 am Operator: MGC
 Sample : 1720267-07 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:23 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Multiple Level Calibration



TIC: 28JUL57.D

(60) 1,3-Dichlorobenzene

11.03min 1.25ug/L

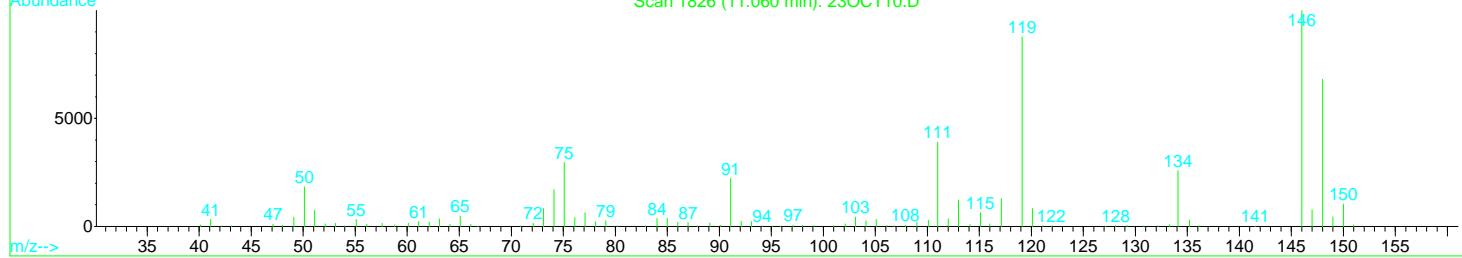
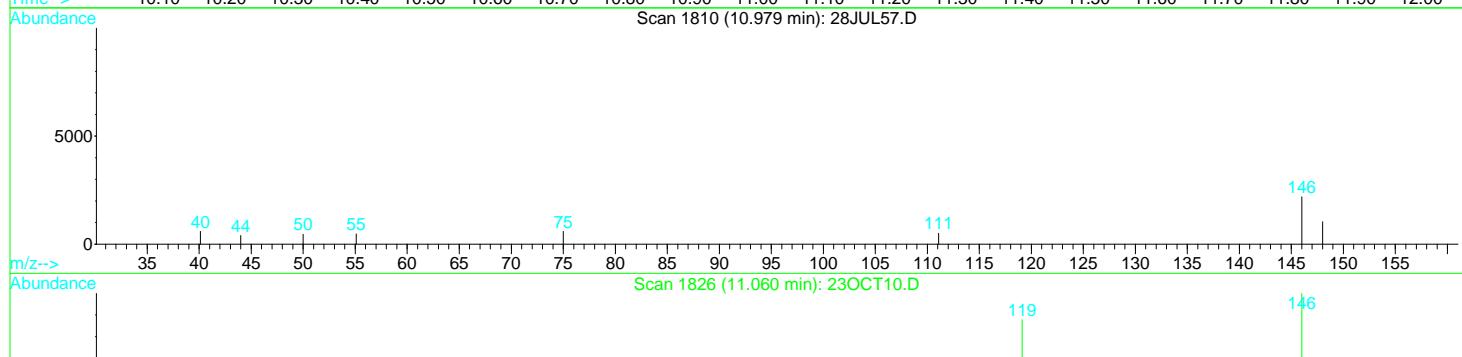
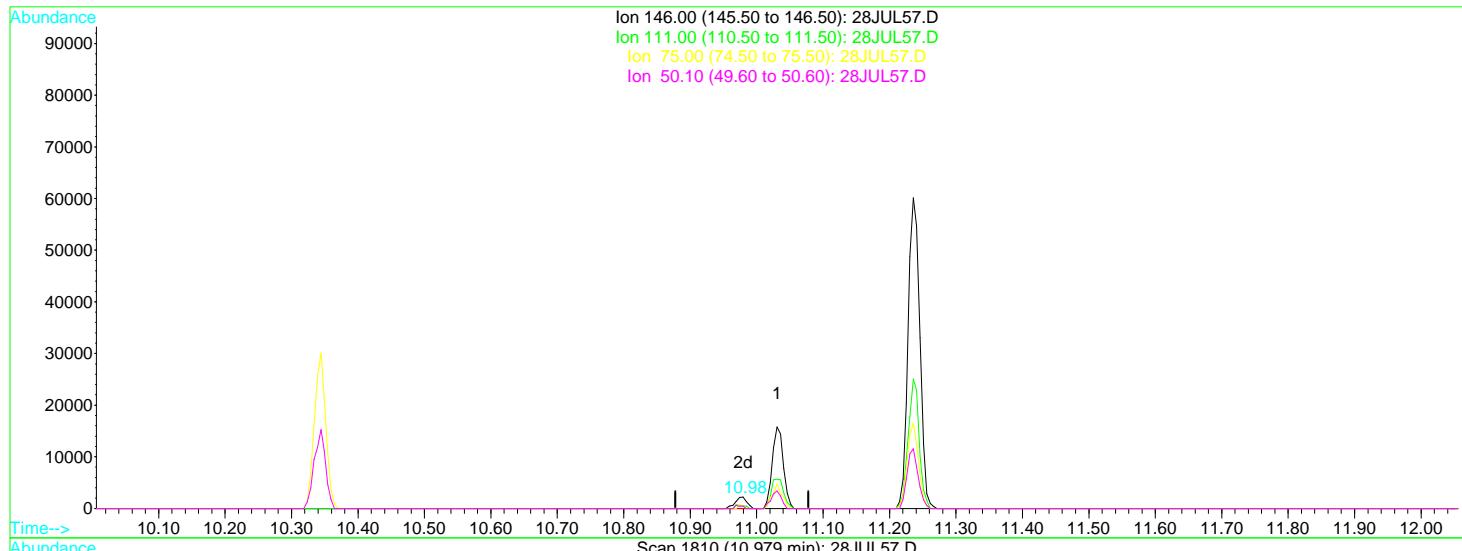
response 18314

Ion	Exp%	Act%
146.00	100	100
111.00	41.20	40.74
75.00	34.30	26.40
50.10	20.80	19.85

Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL57.D Vial: 57
 Acq On : 29 Jul 2017 4:58 am Operator: MGC
 Sample : 1720267-07 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:23 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Multiple Level Calibration



TIC: 28JUL57.D

(60) 1,3-Dichlorobenzene

10.98min 0.18ug/L m

response 2663

Ion	Exp%	Act%
146.00	100	100
111.00	41.20	280.17#
75.00	34.30	181.56#
50.10	20.80	136.50#

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL58.D Vial: 58
 Acq On : 29 Jul 2017 5:21 am Operator: MGC
 Sample : 1720267-08 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multipllr: 1.00

MS Integration Params: rteint.p
 Quant Time: Jul 29 9:24 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	157522	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	236211	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	61874	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	48714	10.59	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	105.90%
31) Toluene d8 SMC#2	8.60	98	281338	9.65	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.50%
49) Bromofluorobenzene SMC#3	10.34	95	89523	9.69	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.90%

Target Compounds

					Qvalue
25) Trichloroethene	7.61	130	2665	0.33	ug/L
40) Chlorobenzene	9.63	112	1864	0.09	ug/L
43) P+m-Xylene	9.78	106	913	0.06	ug/L

(#) = qualifier out of range (m) = manual integration

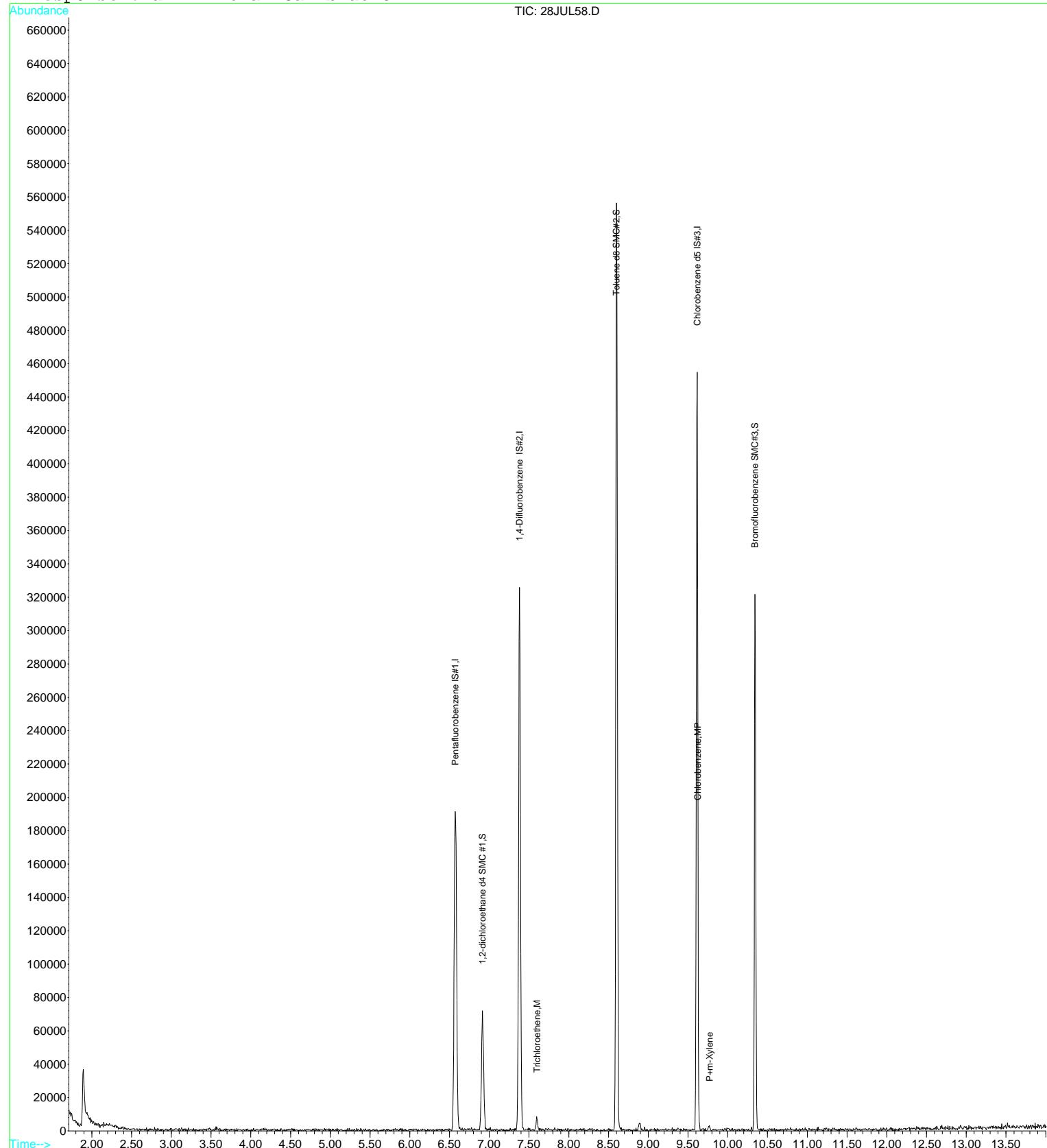
28JUL58.D 82605.M Sat Jul 29 09:26:16 2017

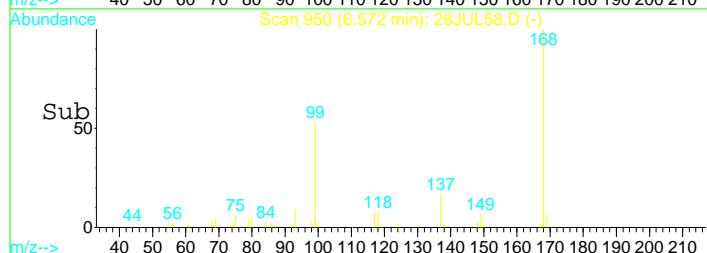
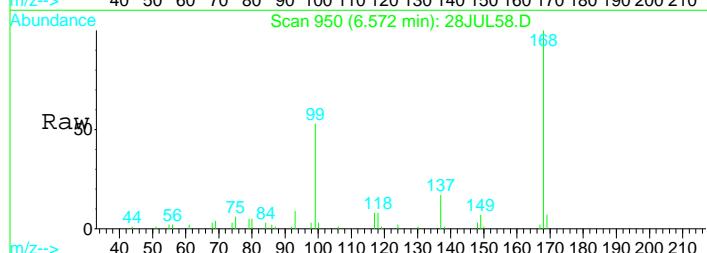
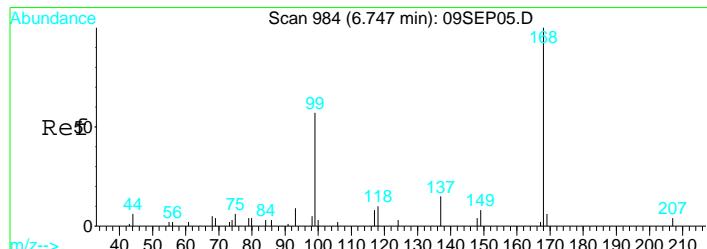
Page 1

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL58.D Vial: 58
 Acq On : 29 Jul 2017 5:21 am Operator: MGC
 Sample : 1720267-08 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:24 2017 Quant Results File: 82605.RES

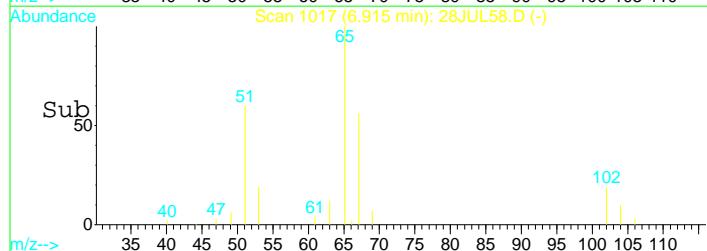
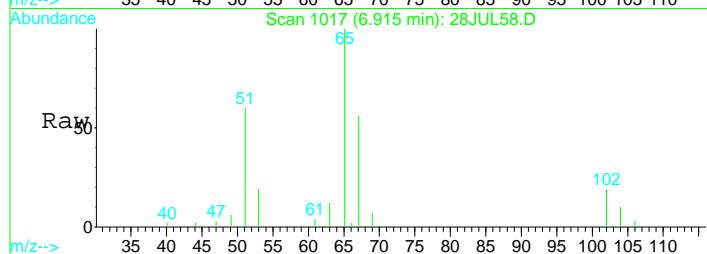
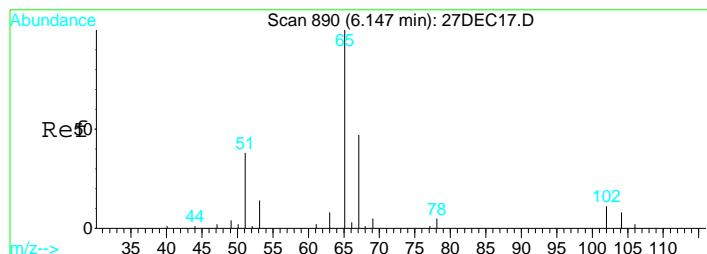
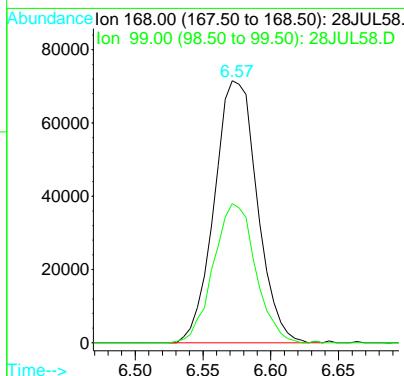
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration





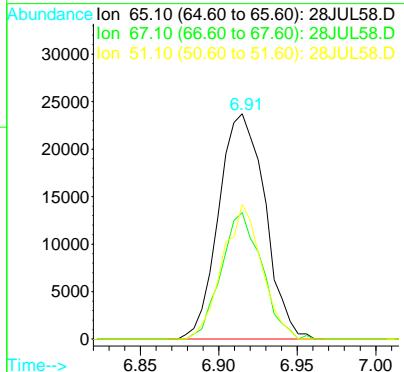
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 950
 Delta R.T. -0.01 min
 Lab File: 28JUL58.D
 Acq: 29 Jul 2017 5:21 am

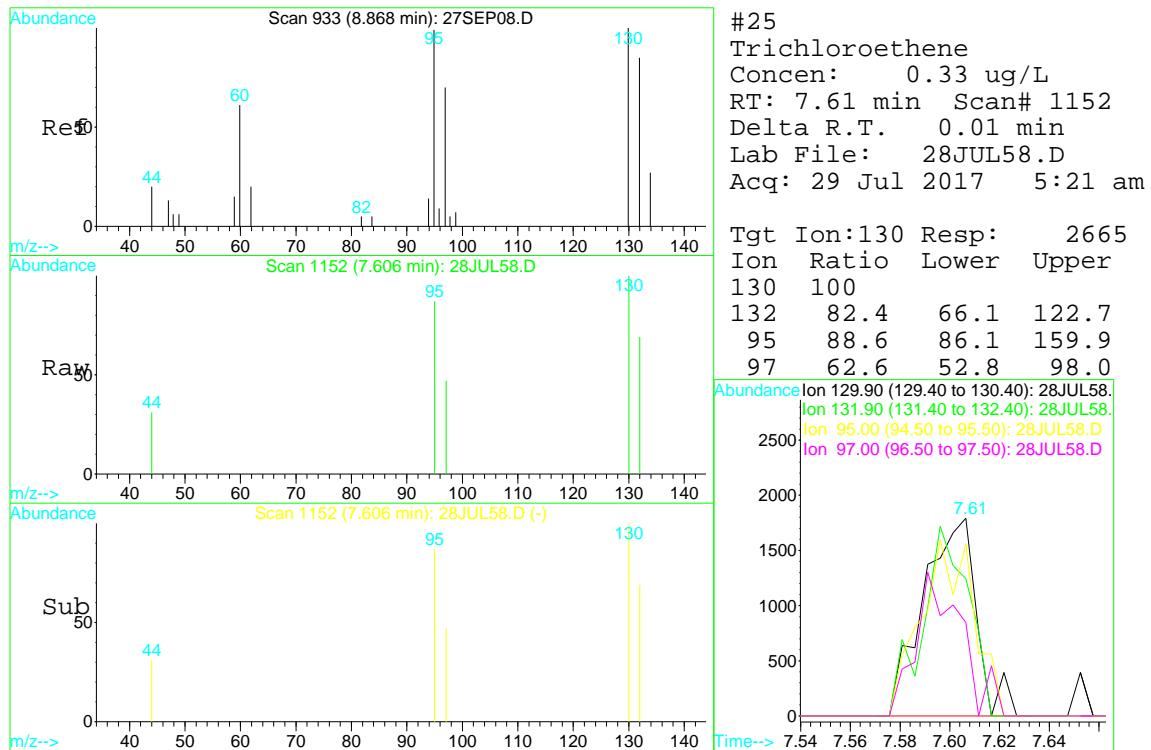
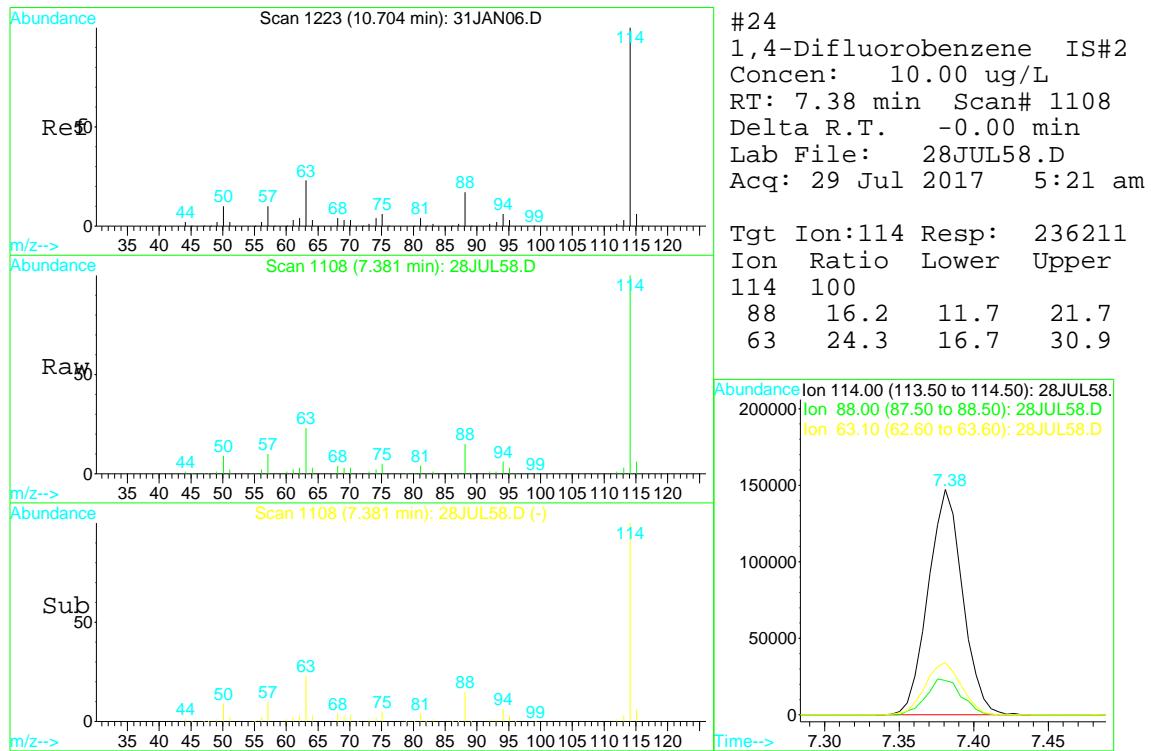
Tgt Ion: 168 Resp: 157522
 Ion Ratio Lower Upper
 168 100
 99 51.9 38.7 71.9

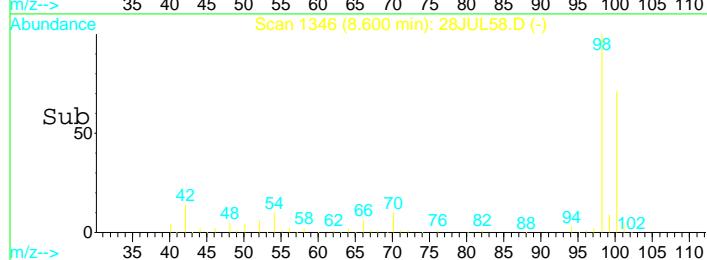
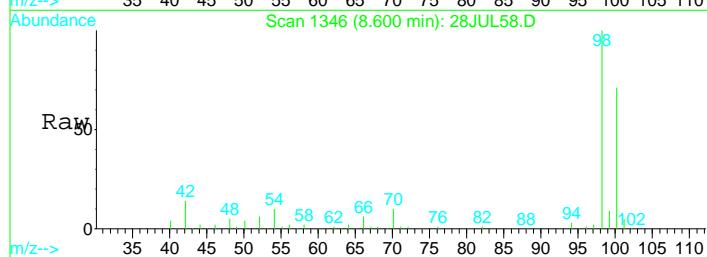
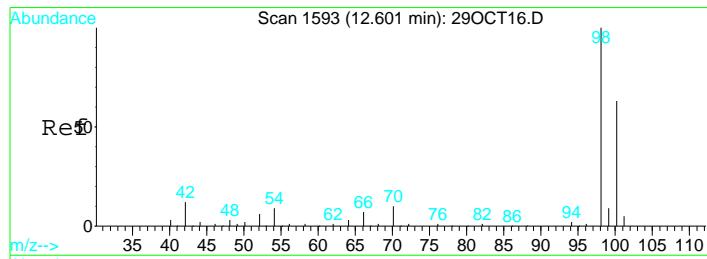


#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.91 min Scan# 1017
 Delta R.T. -0.00 min
 Lab File: 28JUL58.D
 Acq: 29 Jul 2017 5:21 am

Tgt Ion: 65 Resp: 48714
 Ion Ratio Lower Upper
 65 100
 67 49.3 36.2 67.2
 51 50.4 42.0 78.0

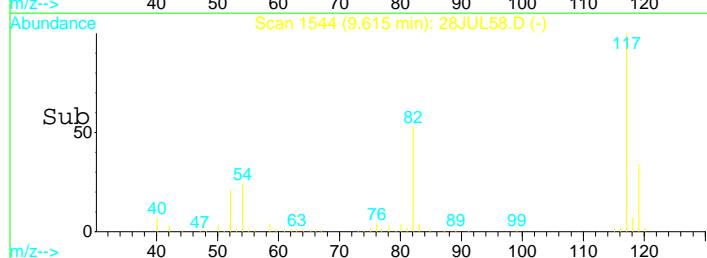
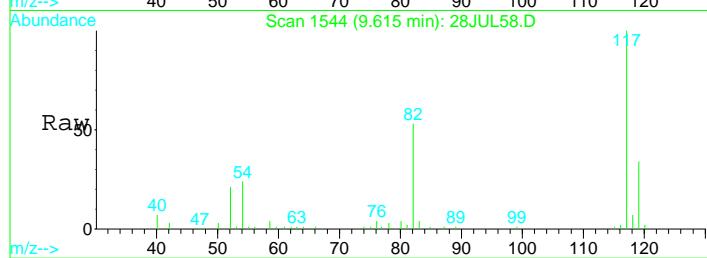
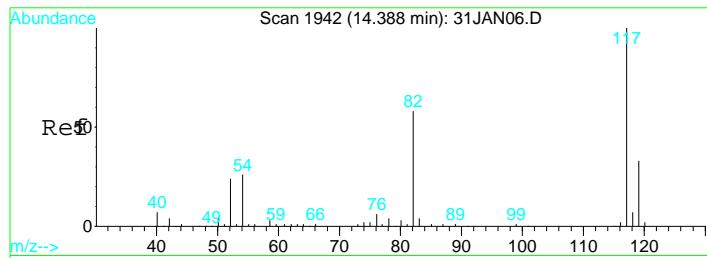
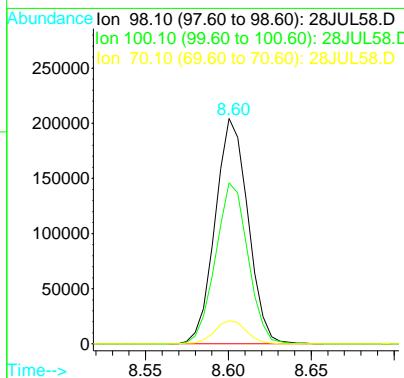






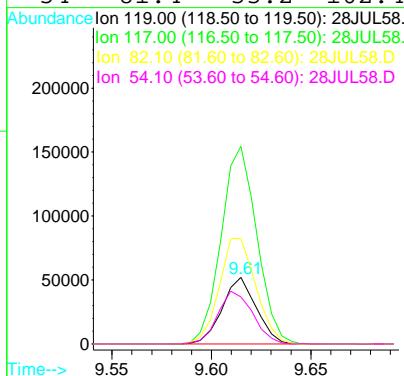
#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. -0.00 min
 Lab File: 28JUL58.D
 Acq: 29 Jul 2017 5:21 am

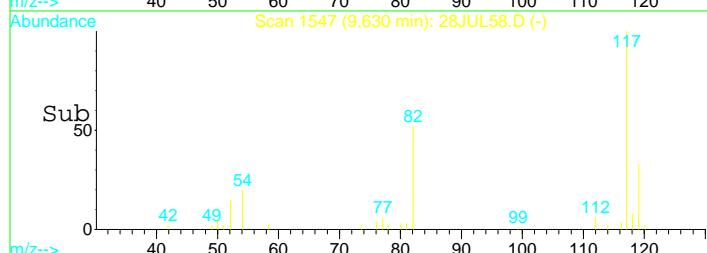
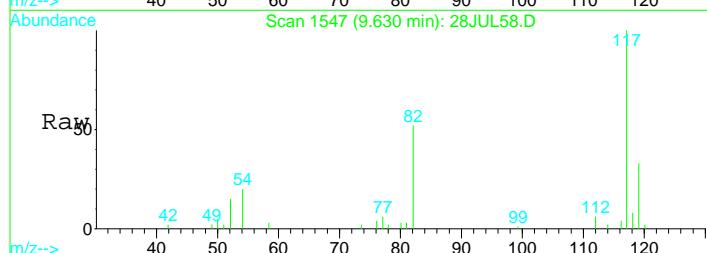
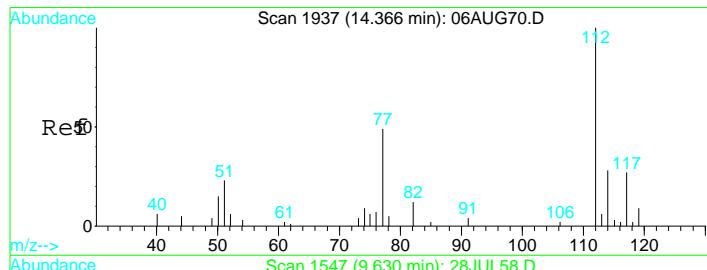
Tgt Ion: 98 Resp: 281338
 Ion Ratio Lower Upper
 98 100
 100 70.5 49.7 92.3
 70 10.0 7.3 13.7



#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.61 min Scan# 1544
 Delta R.T. -0.00 min
 Lab File: 28JUL58.D
 Acq: 29 Jul 2017 5:21 am

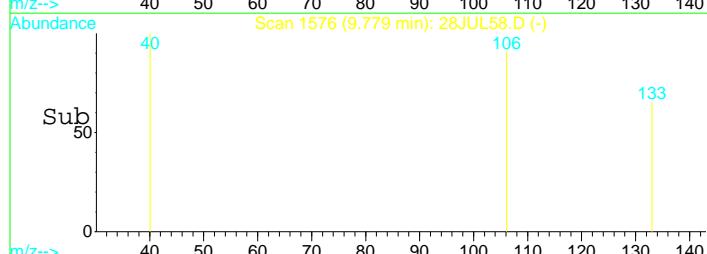
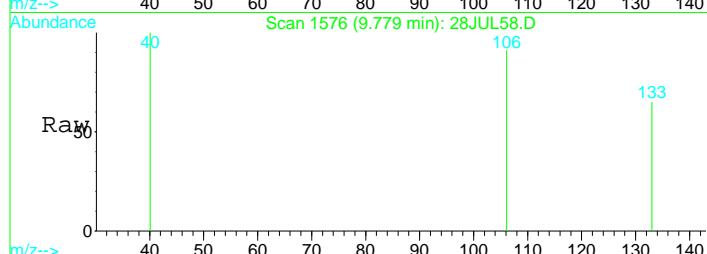
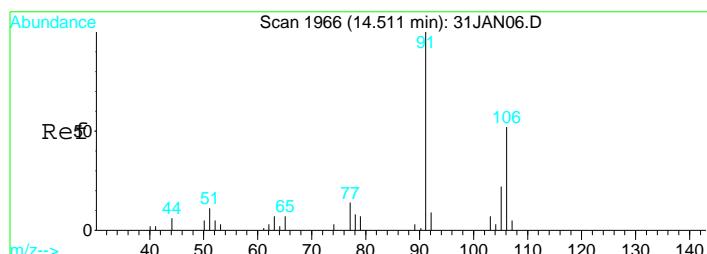
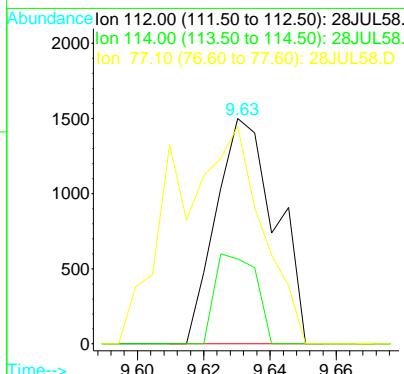
Tgt Ion: 119 Resp: 61874
 Ion Ratio Lower Upper
 119 100
 117 310.2 214.5 398.4
 82 170.4 117.7 218.7
 54 81.4 55.2 102.4





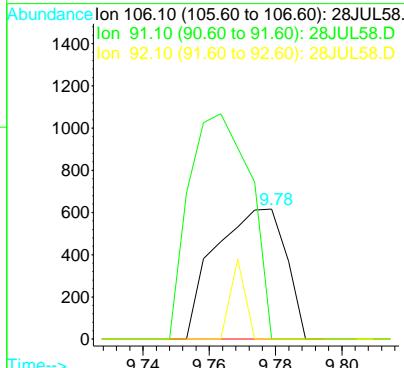
#40
Chlorobenzene
Concen: 0.09 ug/L
RT: 9.63 min Scan# 1547
Delta R.T. -0.01 min
Lab File: 28JUL58.D
Acq: 29 Jul 2017 5:21 am

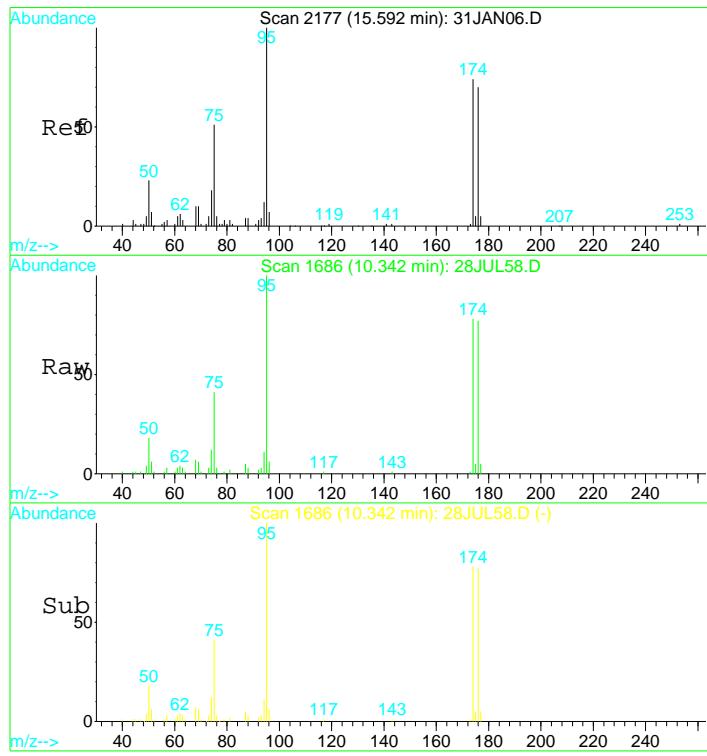
Tgt Ion:112 Resp: 1864
Ion Ratio Lower Upper
112 100
114 27.6 20.6 38.4
77 143.1 48.4 90.0#



#43
P+m-Xylene
Concen: 0.06 ug/L
RT: 9.78 min Scan# 1576
Delta R.T. 0.01 min
Lab File: 28JUL58.D
Acq: 29 Jul 2017 5:21 am

Tgt Ion:106 Resp: 913
Ion Ratio Lower Upper
106 100
91 149.4 135.0 250.6
92 12.8 10.3 19.1





#49

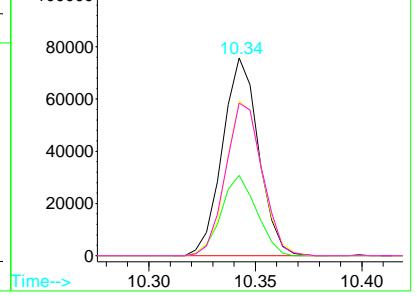
Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.34 min Scan# 1686
 Delta R.T. -0.00 min
 Lab File: 28JUL58.D
 Acq: 29 Jul 2017 5:21 am

Tgt Ion: 95 Resp: 89523

Ion	Ratio	Lower	Upper
95	100		
75	39.9	29.5	54.7
174	78.1	52.3	97.1
176	78.2	49.6	92.2

Abundance

Ion 95.00 (94.50 to 95.50): 28JUL58.D
 Ion 75.00 (74.50 to 75.50): 28JUL58.D
 Ion 173.90 (173.40 to 174.40): 28JUL58.D
 Ion 175.90 (175.40 to 176.40): 28JUL58.D



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL58.D Vial: 58
Acq On : 29 Jul 2017 5:21 am Operator: MGC
Sample : 1720267-08 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:30 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration
DataAcq Meth : 82605

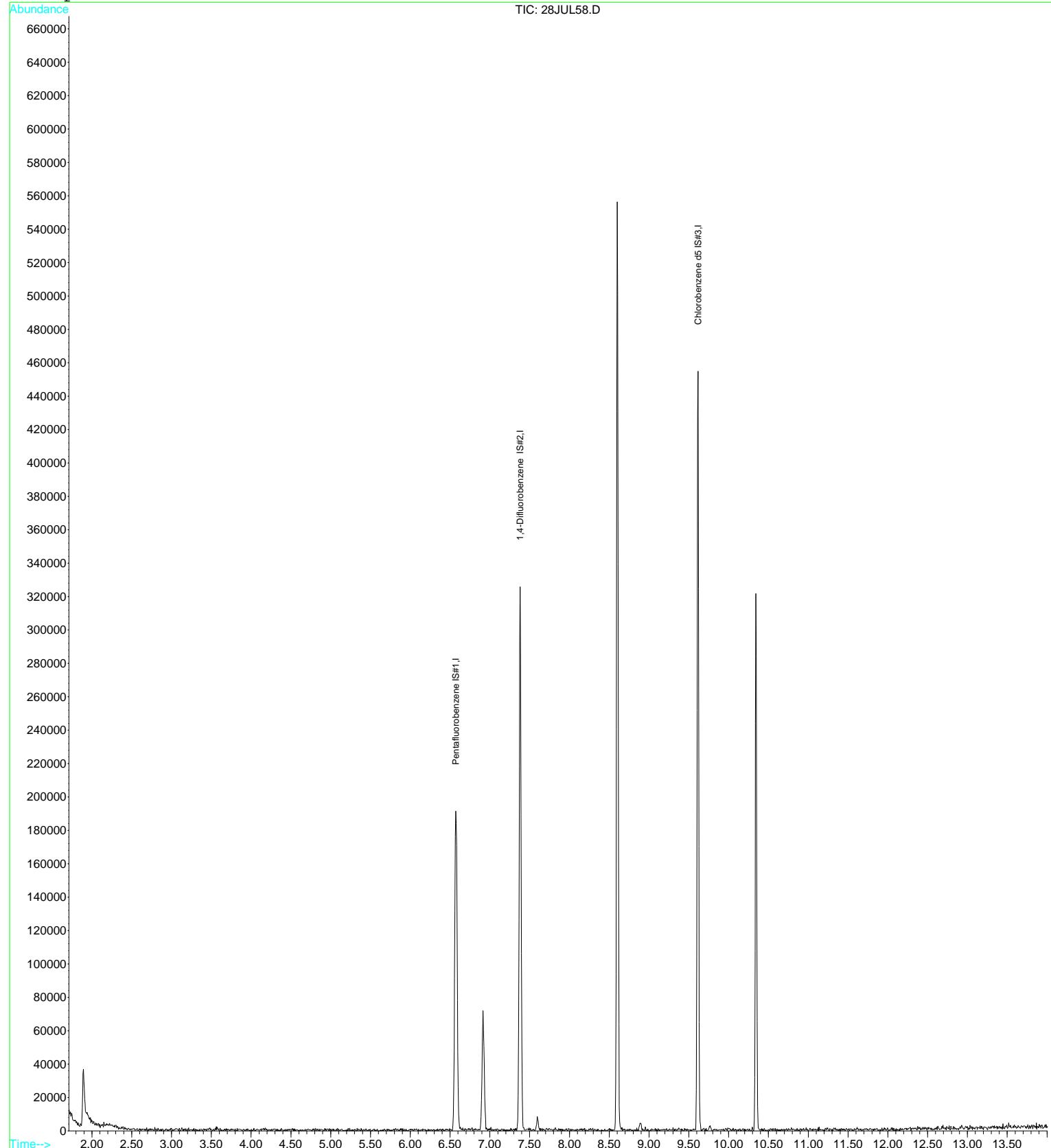
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----	-----	-----	-----	-----	-----	-----
1) Pentafluorobenzene IS#1	6.57	168	157522	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	236211	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	61874	10.00	ug/L	0.00

Target Compounds	Qvalue
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Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL58.D Vial: 58
Acq On : 29 Jul 2017 5:21 am Operator: MGC
Sample : 1720267-08 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:30 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL59.D Vial: 59
 Acq On : 29 Jul 2017 5:44 am Operator: MGC
 Sample : 1720267-09 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multipllr: 1.00

MS Integration Params: rteint.p
 Quant Time: Jul 29 9:24 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	159882	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	238644	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	63321	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	48269	10.34	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	103.40%
31) Toluene d8 SMC#2	8.60	98	287530	9.76	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.60%
49) Bromofluorobenzene SMC#3	10.34	95	88361	9.35	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	93.50%

Target Compounds					Qvalue	
43) P+m-Xylene	9.77	106	1056	0.07	ug/L	# 93

(#) = qualifier out of range (m) = manual integration

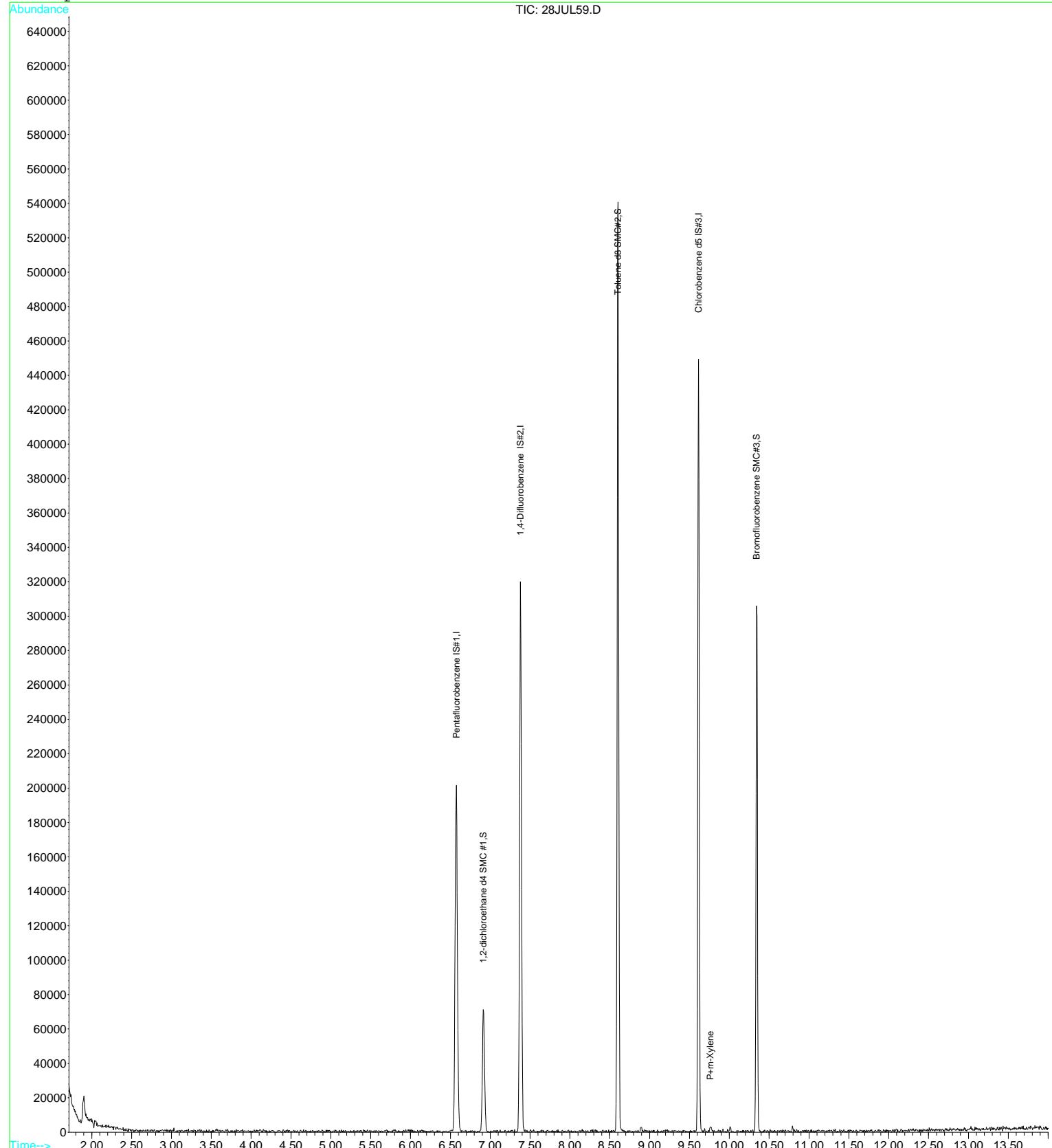
28JUL59.D 82605.M Sat Jul 29 09:26:17 2017

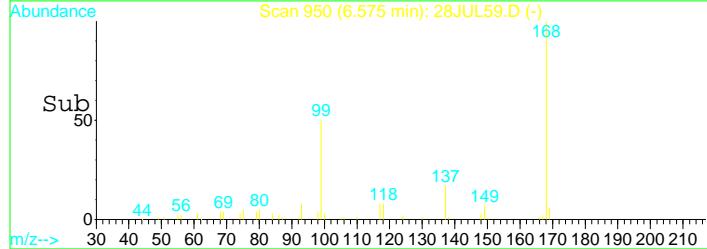
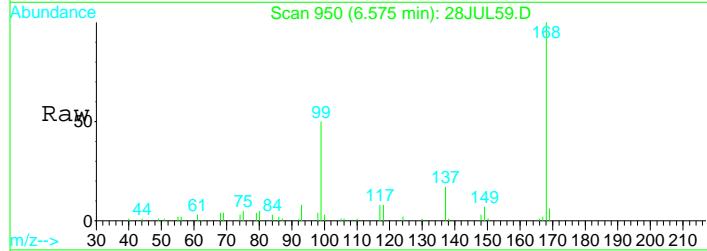
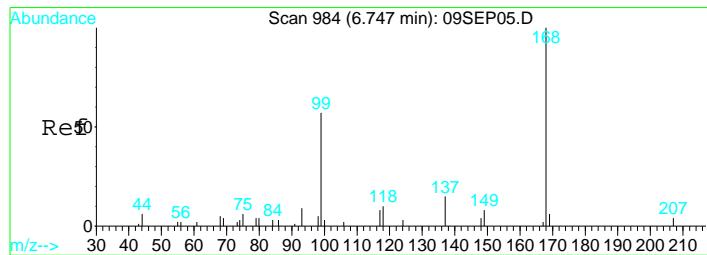
Page 1

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL59.D Vial: 59
Acq On : 29 Jul 2017 5:44 am Operator: MGC
Sample : 1720267-09 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:24 2017 Quant Results File: 82605.RES

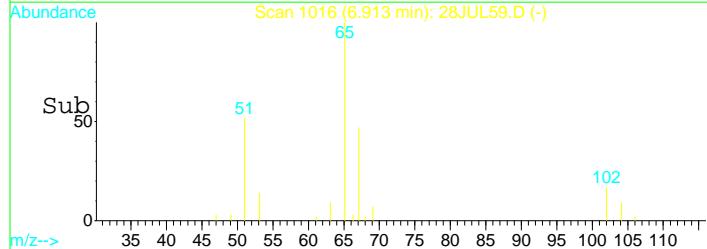
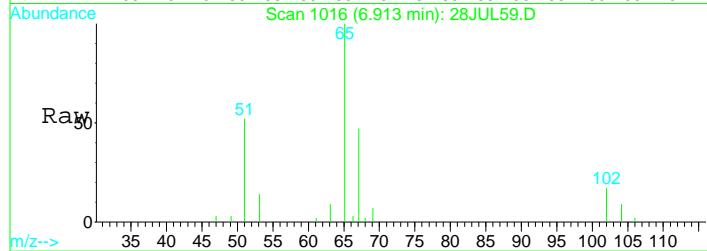
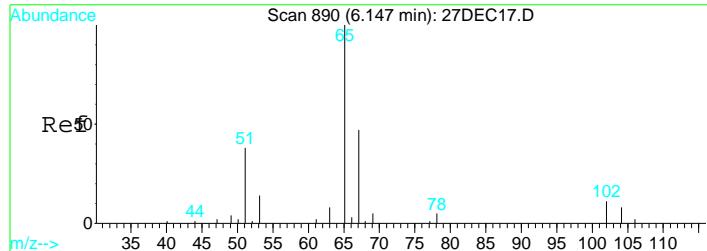
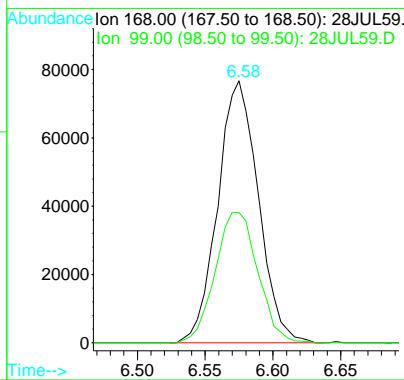
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration





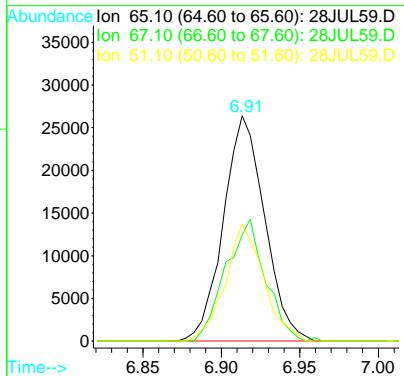
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.58 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 28JUL59.D
 Acq: 29 Jul 2017 5:44 am

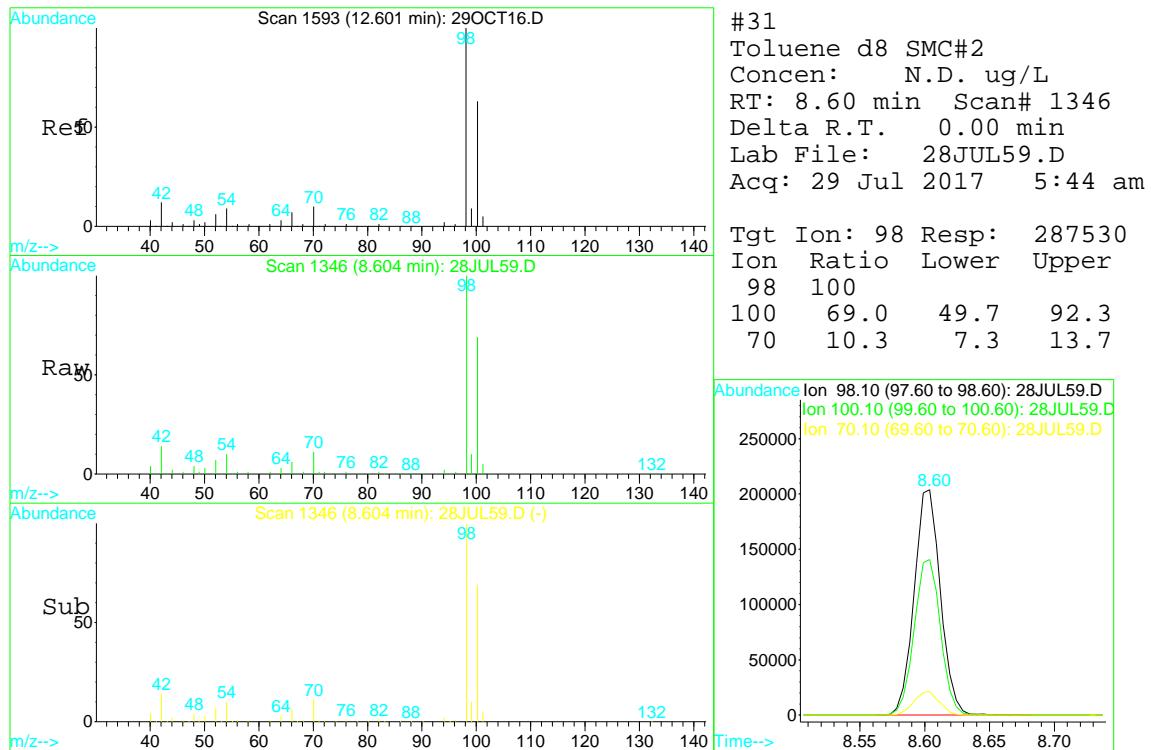
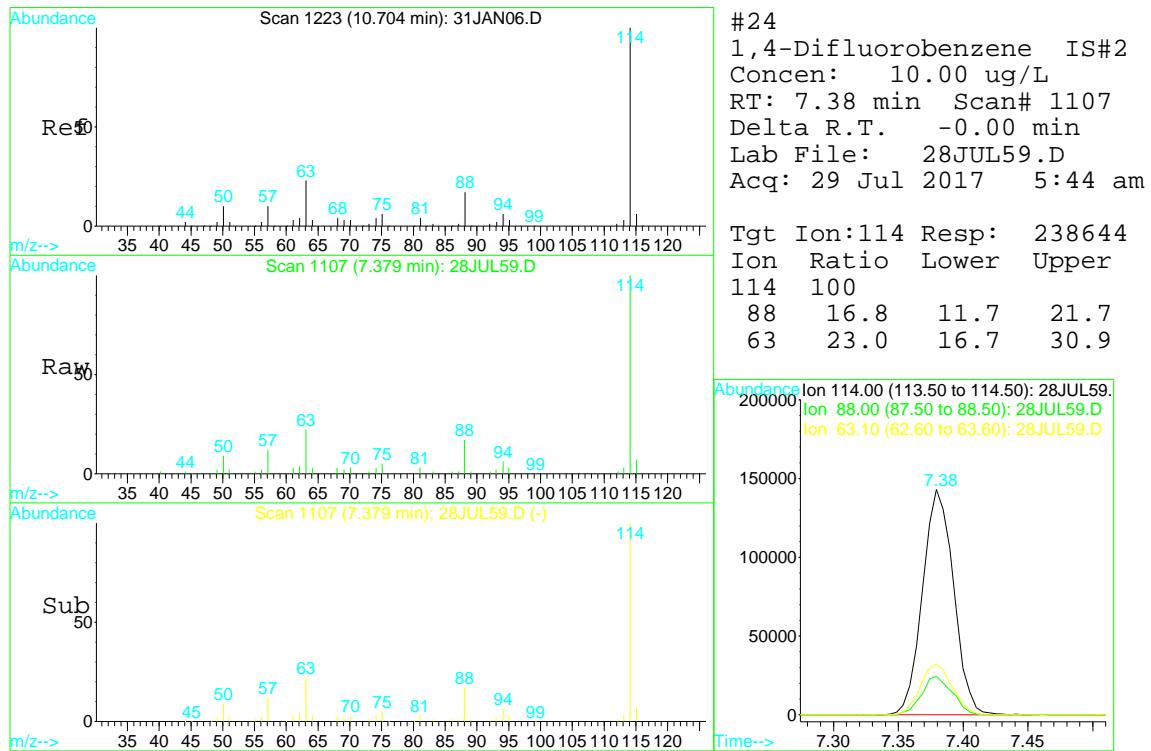
Tgt Ion: 168 Resp: 159882
 Ion Ratio Lower Upper
 168 100
 99 52.2 38.7 71.9

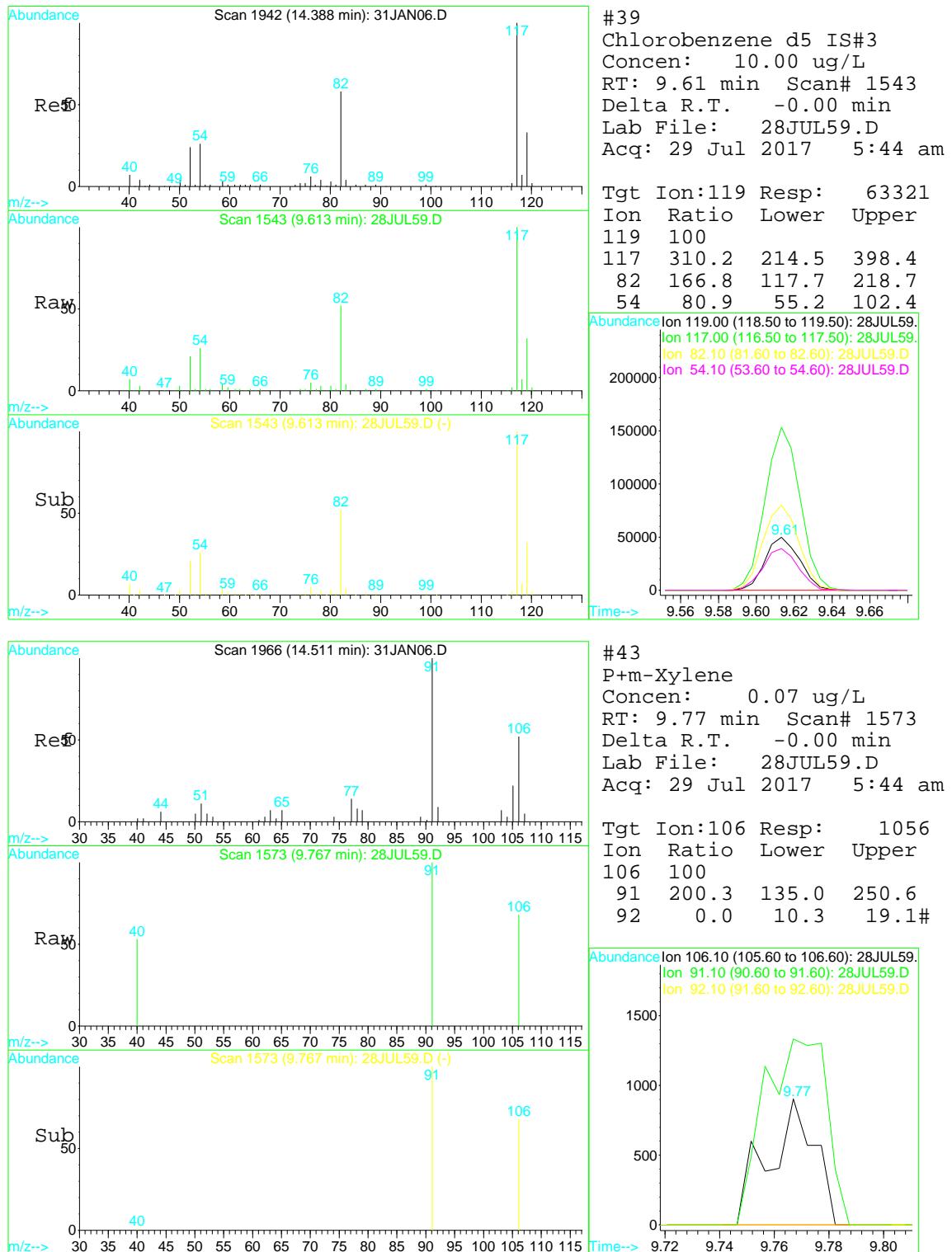


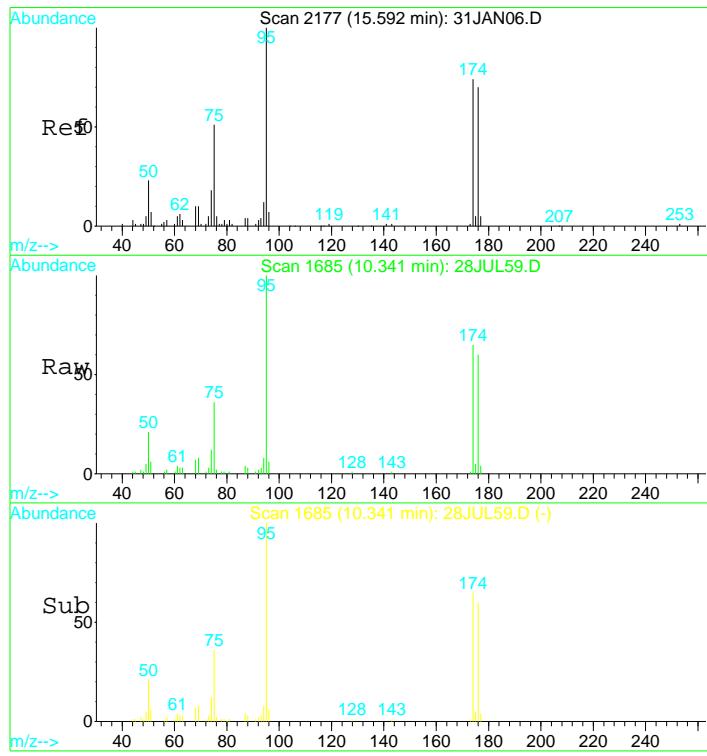
#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.91 min Scan# 1016
 Delta R.T. -0.00 min
 Lab File: 28JUL59.D
 Acq: 29 Jul 2017 5:44 am

Tgt Ion: 65 Resp: 48269
 Ion Ratio Lower Upper
 65 100
 67 52.3 36.2 67.2
 51 48.3 42.0 78.0







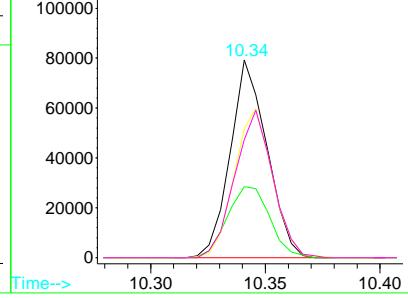


#49

Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.34 min Scan# 1685
 Delta R.T. -0.00 min
 Lab File: 28JUL59.D
 Acq: 29 Jul 2017 5:44 am

Tgt Ion: 95 Resp: 88361
 Ion Ratio Lower Upper
 95 100
 75 41.6 29.5 54.7
 174 78.2 52.3 97.1
 176 77.0 49.6 92.2

Abundance Ion 95.00 (94.50 to 95.50): 28JUL59.D
 120000 Ion 75.00 (74.50 to 75.50): 28JUL59.D
 Ion 173.90 (173.40 to 174.40): 28JUL59.
 Ion 175.90 (175.40 to 176.40): 28JUL59.



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL59.D Vial: 59
Acq On : 29 Jul 2017 5:44 am Operator: MGC
Sample : 1720267-09 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:30 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration
DataAcq Meth : 82605

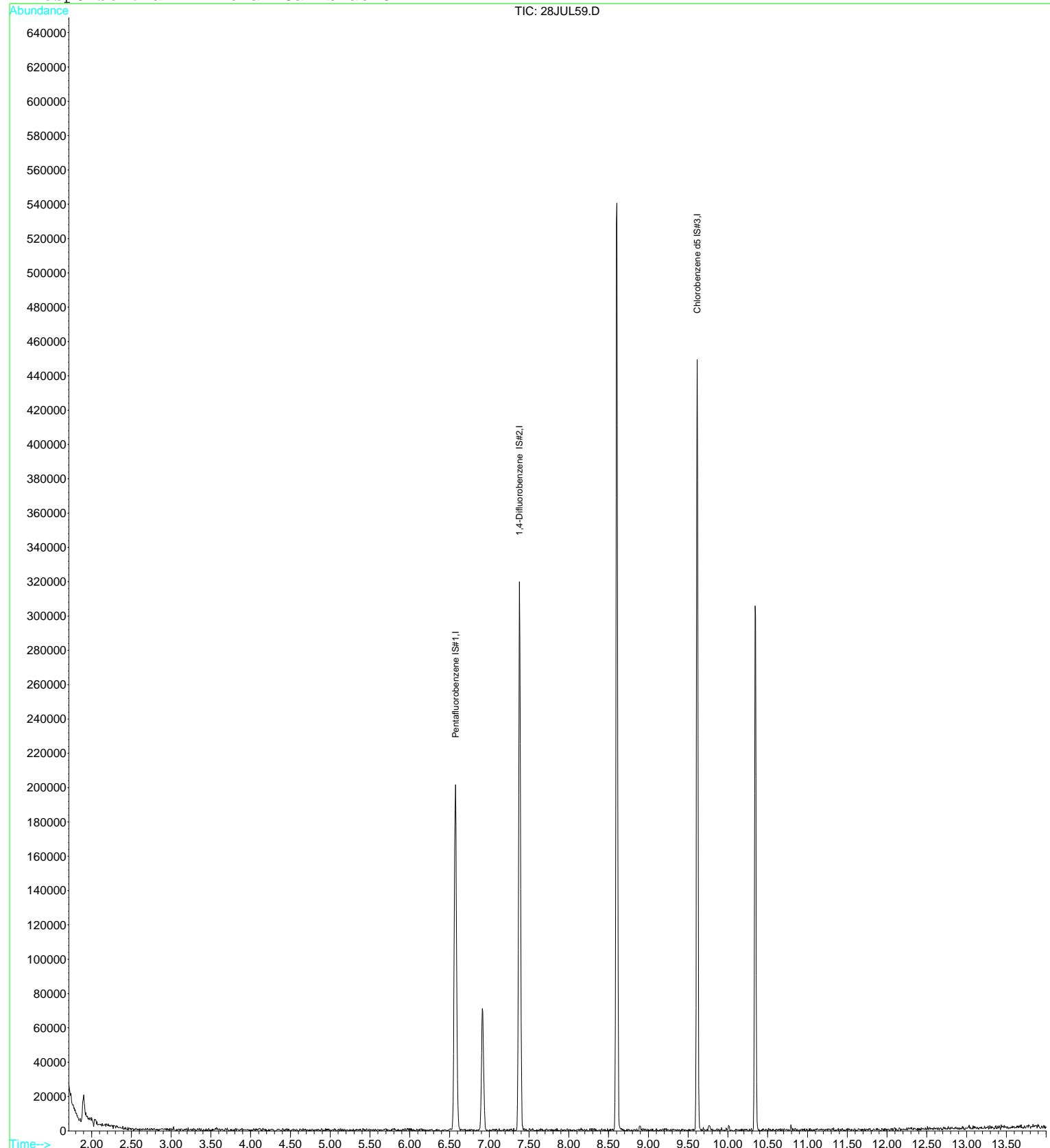
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----	-----	-----	-----	-----	-----	-----
1) Pentafluorobenzene IS#1	6.58	168	159882	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	238644	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	63321	10.00	ug/L	0.00

Target Compounds	Qvalue
-----	-----

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL59.D Vial: 59
Acq On : 29 Jul 2017 5:44 am Operator: MGC
Sample : 1720267-09 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:30 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL67.D Vial: 67
 Acq On : 29 Jul 2017 8:48 am Operator: MGC
 Sample : 1720267-10 Inst : MS-V5
 Misc : 1 Unspiked; 25ML; pH=1 Multipllr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:40 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	145509	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	211349	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	56923	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	43647	10.27	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	102.70%
31) Toluene d8 SMC#2	8.60	98	251763	9.65	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.50%
49) Bromofluorobenzene SMC#3	10.35	95	82119	9.66	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.60%

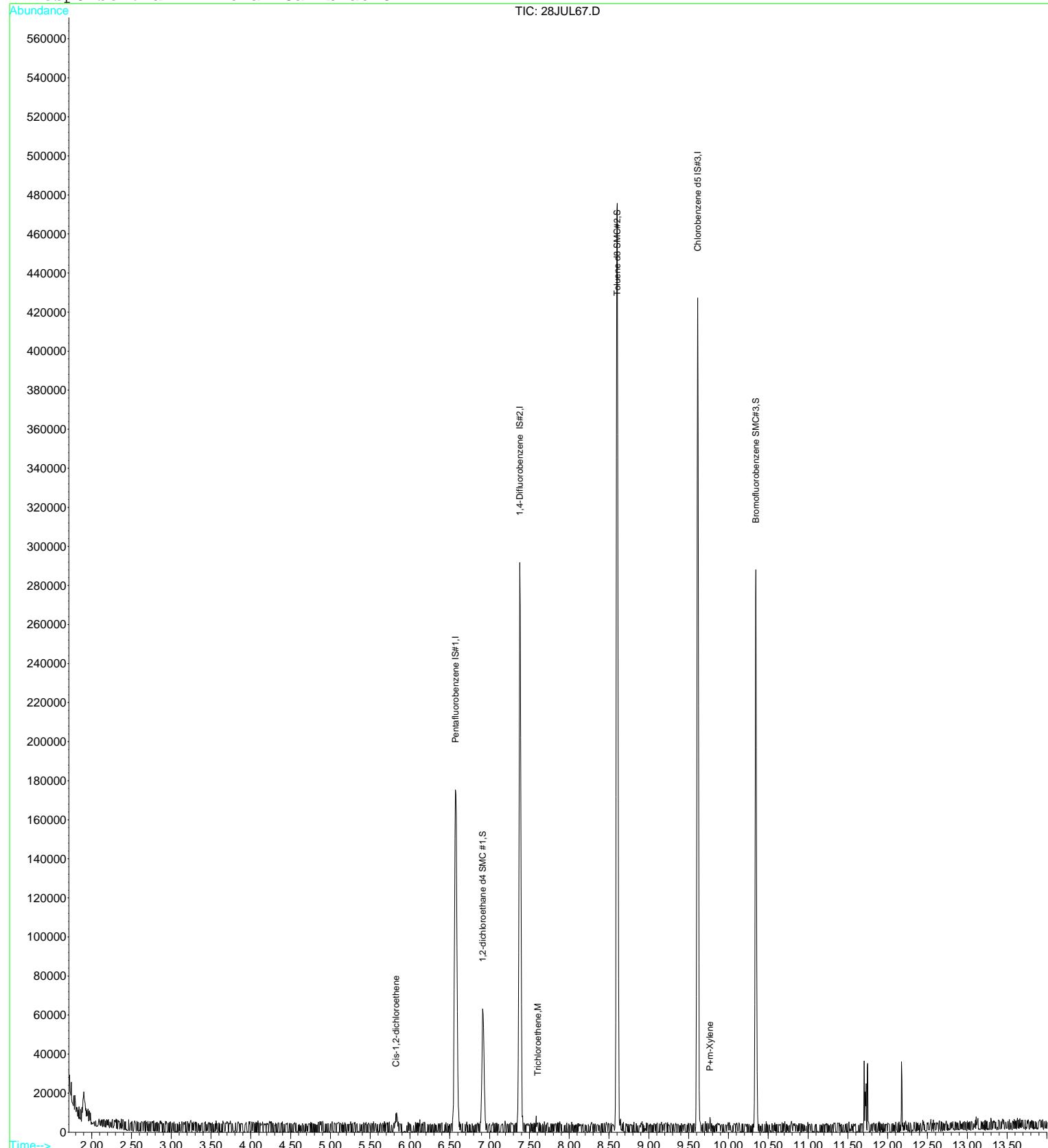
Target Compounds

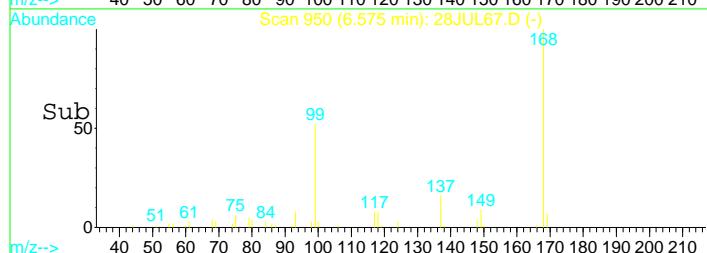
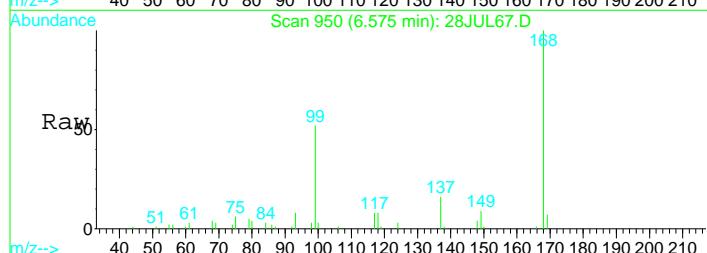
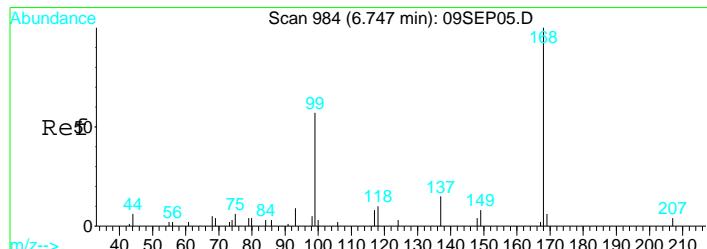
				Qvalue
15) Cis-1,2-dichloroethene	5.82	96	3097	0.41 ug/L # 84
25) Trichloroethene	7.61	130	1162	0.16 ug/L # 77
43) P+m-Xylene	9.77	106	1020	0.08 ug/L # 84

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL67.D Vial: 67
Acq On : 29 Jul 2017 8:48 am Operator: MGC
Sample : 1720267-10 Inst : MS-V5
Misc : 1 Unspiked;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:40 2017 Quant Results File: 82605.RES

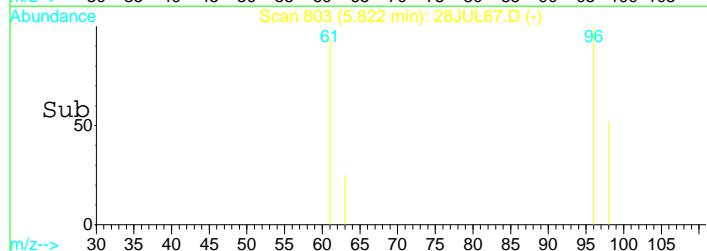
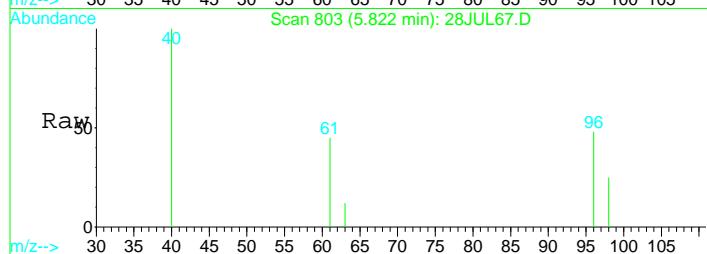
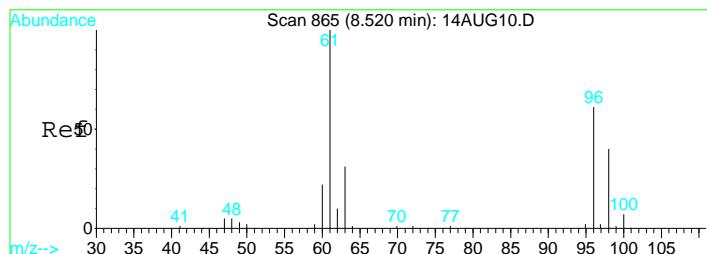
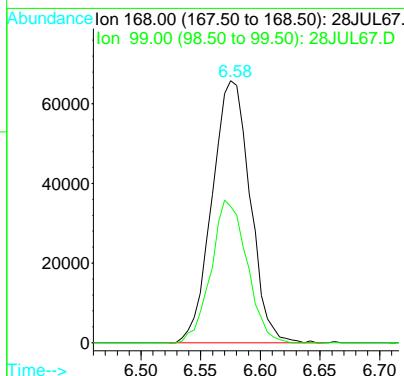
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration





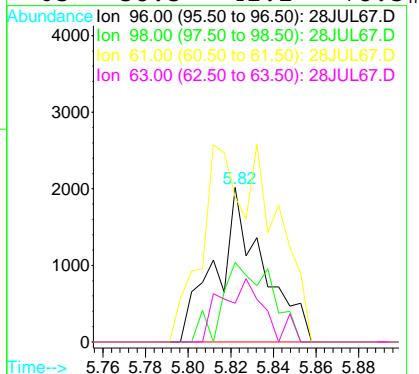
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.58 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 28JUL67.D
 Acq: 29 Jul 2017 8:48 am

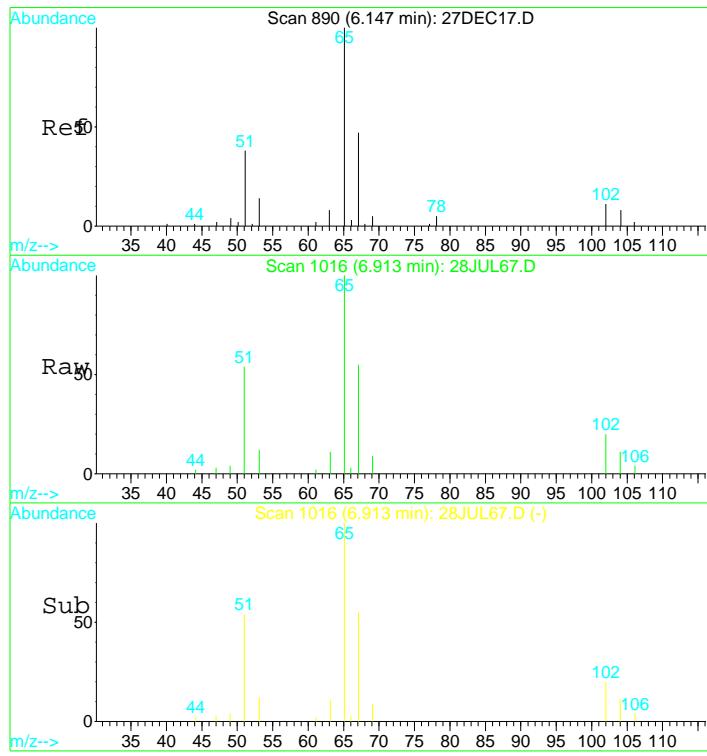
Tgt Ion: 168 Resp: 145509
 Ion Ratio Lower Upper
 168 100
 99 51.2 38.7 71.9



#15
 Cis-1,2-dichloroethene
 Concen: 0.41 ug/L
 RT: 5.82 min Scan# 803
 Delta R.T. -0.00 min
 Lab File: 28JUL67.D
 Acq: 29 Jul 2017 8:48 am

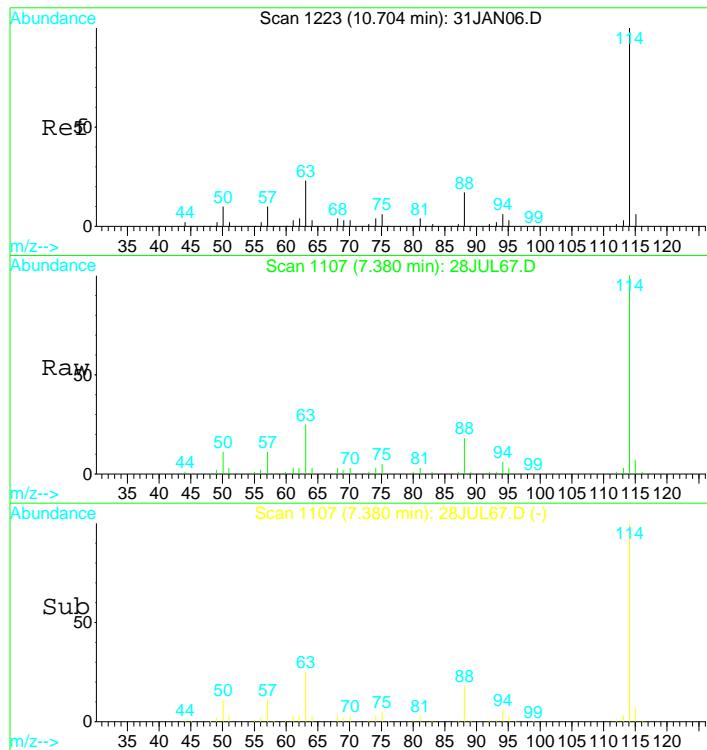
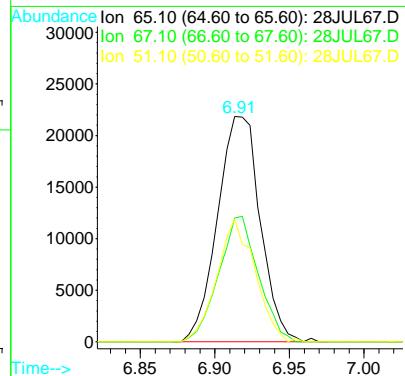
Tgt Ion: 96 Resp: 3097
 Ion Ratio Lower Upper
 96 100
 98 54.2 51.9 96.3
 61 187.8 122.8 228.0
 63 38.3 42.1 78.3#





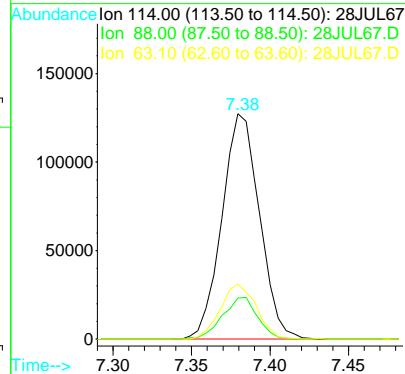
#21
 1,2-dichloroethane d4 SMC #1
 Concen: N.D. ug/L
 RT: 6.91 min Scan# 1016
 Delta R.T. -0.00 min
 Lab File: 28JUL67.D
 Acq: 29 Jul 2017 8:48 am

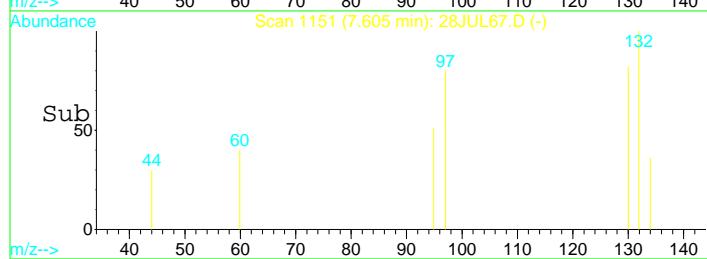
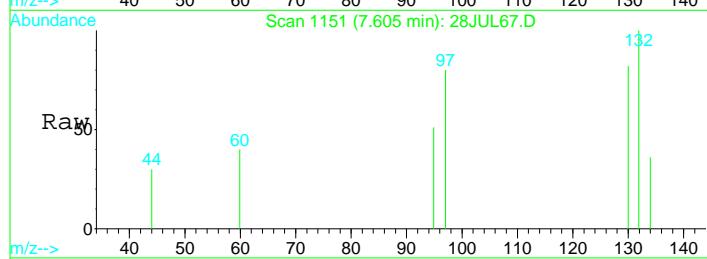
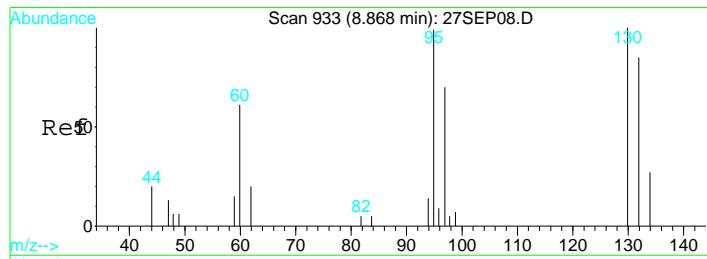
Tgt Ion: 65 Resp: 43647
 Ion Ratio Lower Upper
 65 100
 67 51.6 36.2 67.2
 51 48.5 42.0 78.0



#24
 1,4-Difluorobenzene IS#2
 Concen: 10.00 ug/L
 RT: 7.38 min Scan# 1107
 Delta R.T. -0.00 min
 Lab File: 28JUL67.D
 Acq: 29 Jul 2017 8:48 am

Tgt Ion: 114 Resp: 211349
 Ion Ratio Lower Upper
 114 100
 88 17.3 11.7 21.7
 63 23.4 16.7 30.9

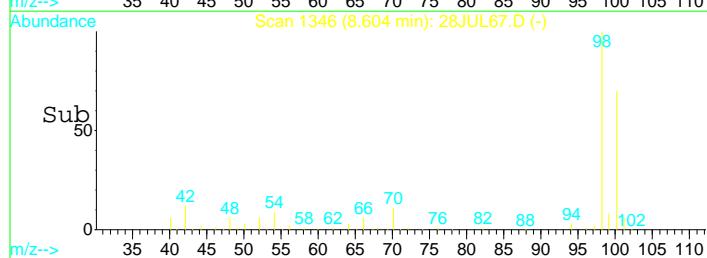
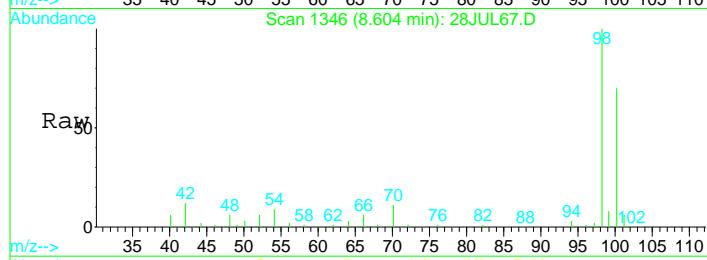
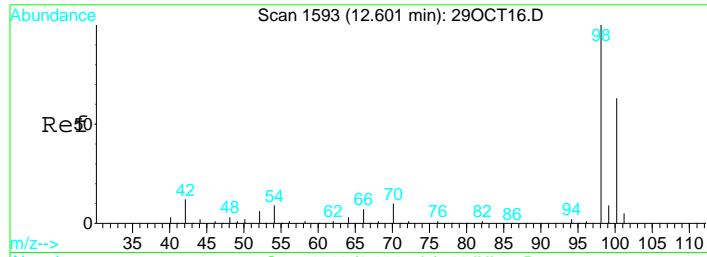
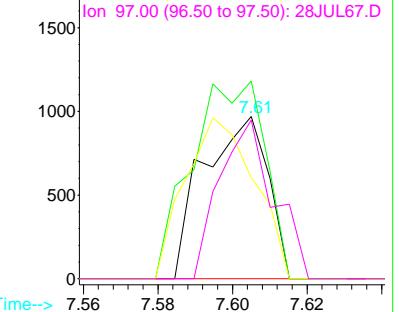




#25
 Trichloroethene
 Concen: 0.16 ug/L
 RT: 7.61 min Scan# 1151
 Delta R.T. 0.01 min
 Lab File: 28JUL67.D
 Acq: 29 Jul 2017 8:48 am

Tgt Ion: 130 Resp: 1162
 Ion Ratio Lower Upper
 130 100
 132 138.6 66.1 122.7#
 95 106.7 86.1 159.9
 97 81.9 52.8 98.0

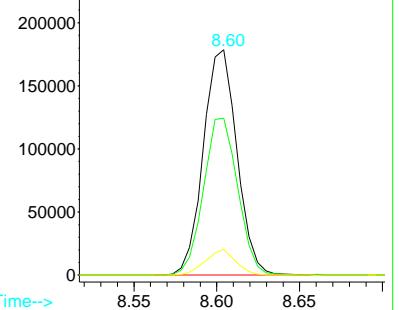
Abundance
 Ion 129.90 (129.40 to 130.40): 28JUL67.
 Ion 131.90 (131.40 to 132.40): 28JUL67.
 Ion 95.00 (94.50 to 95.50): 28JUL67.D
 Ion 97.00 (96.50 to 97.50): 28JUL67.D

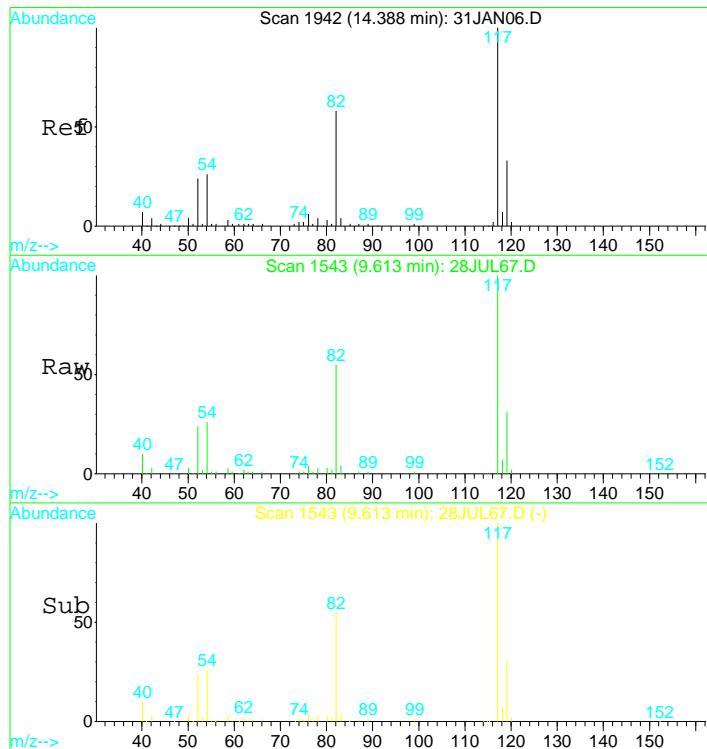


#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. 0.00 min
 Lab File: 28JUL67.D
 Acq: 29 Jul 2017 8:48 am

Tgt Ion: 98 Resp: 251763
 Ion Ratio Lower Upper
 98 100
 100 70.7 49.7 92.3
 70 10.3 7.3 13.7

Abundance
 Ion 98.10 (97.60 to 98.60): 28JUL67.D
 Ion 100.10 (99.60 to 100.60): 28JUL67.D
 Ion 70.10 (69.60 to 70.60): 28JUL67.D

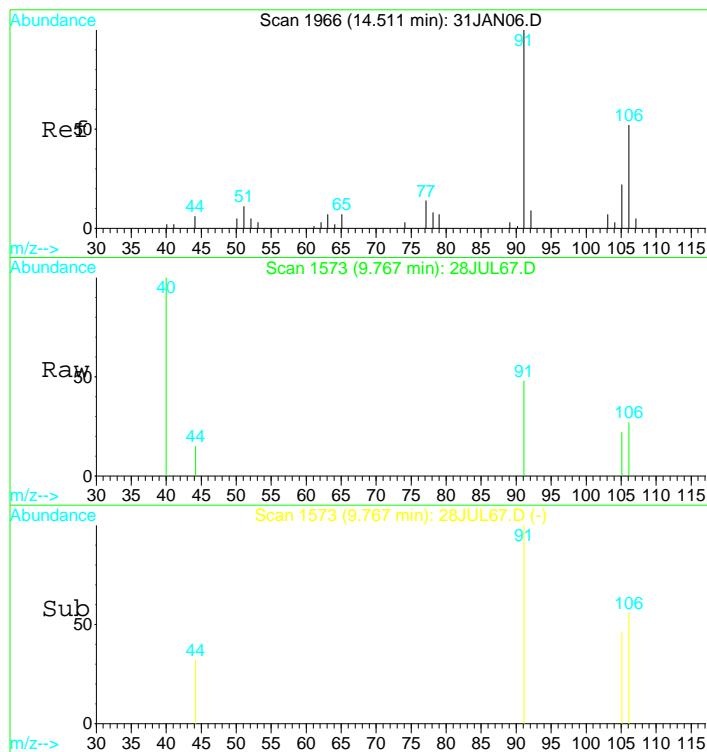
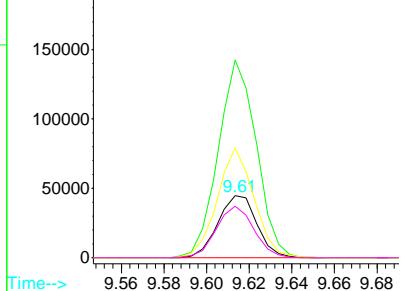




#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.61 min Scan# 1543
 Delta R.T. -0.00 min
 Lab File: 28JUL67.D
 Acq: 29 Jul 2017 8:48 am

Tgt Ion:119 Resp: 56923
 Ion Ratio Lower Upper
 119 100
 117 311.5 214.5 398.4
 82 166.9 117.7 218.7
 54 80.0 55.2 102.4

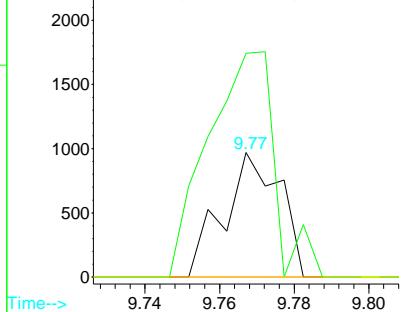
Abundance
 Ion 119.00 (118.50 to 119.50): 28JUL67.
 Ion 117.00 (116.50 to 117.50): 28JUL67.
 Ion 82.10 (81.60 to 82.60): 28JUL67.D
 Ion 54.10 (53.60 to 54.60): 28JUL67.D

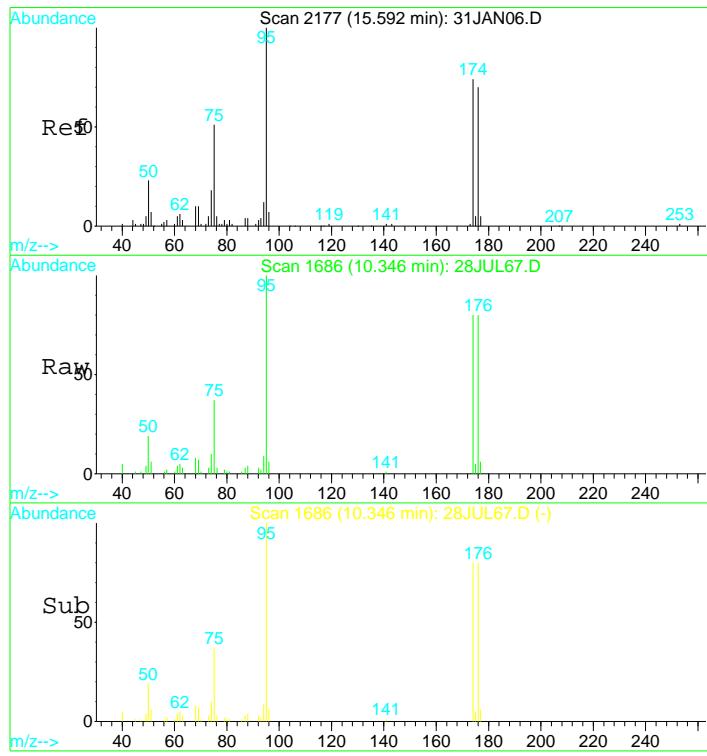


#43
 P+m-Xylene
 Concen: 0.08 ug/L
 RT: 9.77 min Scan# 1573
 Delta R.T. -0.00 min
 Lab File: 28JUL67.D
 Acq: 29 Jul 2017 8:48 am

Tgt Ion:106 Resp: 1020
 Ion Ratio Lower Upper
 106 100
 91 213.5 135.0 250.6
 92 0.0 10.3 19.1#

Abundance
 Ion 106.10 (105.60 to 106.60): 28JUL67.
 Ion 91.10 (90.60 to 91.60): 28JUL67.D
 Ion 92.10 (91.60 to 92.60): 28JUL67.D





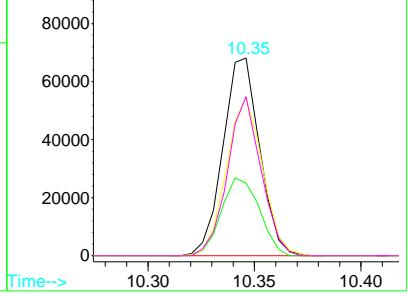
#49

Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.35 min Scan# 1686
 Delta R.T. 0.00 min
 Lab File: 28JUL67.D
 Acq: 29 Jul 2017 8:48 am

Tgt Ion: 95 Resp: 82119

Ion	Ratio	Lower	Upper
95	100		
75	40.9	29.5	54.7
174	78.7	52.3	97.1
176	73.1	49.6	92.2

Abundance Ion 95.00 (94.50 to 95.50): 28JUL67.D
 Ion 75.00 (74.50 to 75.50): 28JUL67.D
 Ion 173.90 (173.40 to 174.40): 28JUL67.D
 Ion 175.90 (175.40 to 176.40): 28JUL67.D



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL67.D Vial: 67
Acq On : 29 Jul 2017 8:48 am Operator: MGC
Sample : 1720267-10 Inst : MS-V5
Misc : 1 Unspiked; 25ML; pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:42 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration
DataAcq Meth : 82605

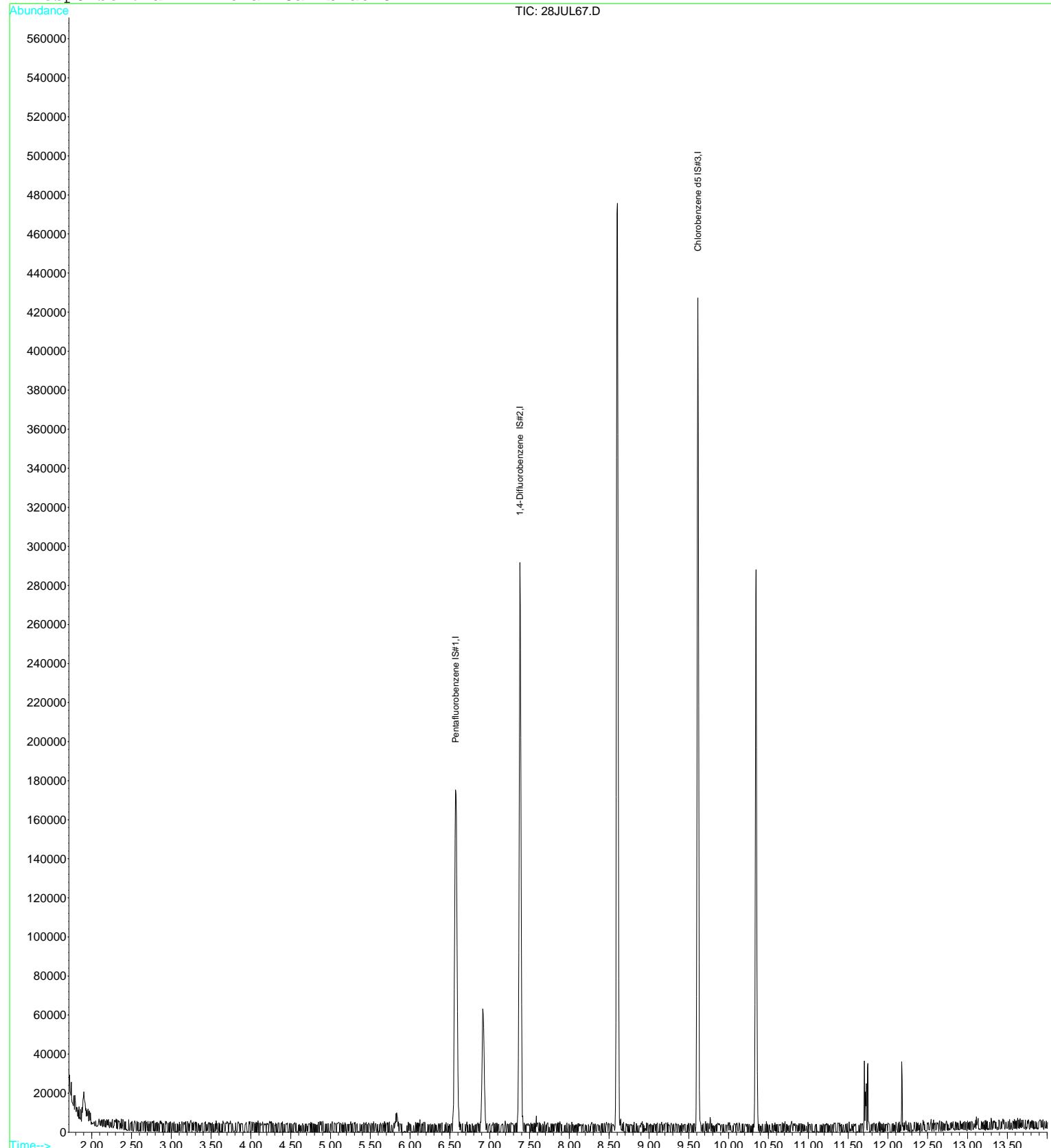
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----	-----	-----	-----	-----	-----	-----
1) Pentafluorobenzene IS#1	6.58	168	145509	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	211349	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	56923	10.00	ug/L	0.00

Target Compounds	Qvalue
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Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL67.D Vial: 67
Acq On : 29 Jul 2017 8:48 am Operator: MGC
Sample : 1720267-10 Inst : MS-V5
Misc : 1 Unspiked;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:42 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL60.D Vial: 60
 Acq On : 29 Jul 2017 6:07 am Operator: MGC
 Sample : 1720267-11 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multipllr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 29 9:25 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	159751	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	232620	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	62913	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	48561	10.41	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	104.10%
31) Toluene d8 SMC#2	8.60	98	289622	10.08	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	100.80%
49) Bromofluorobenzene SMC#3	10.34	95	92968	9.90	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.00%

Target Compounds					Qvalue	
4) Vinyl chloride	2.07	62	2847	0.24	ug/L	98
15) Cis-1,2-dichloroethene	5.82	96	597	0.07	ug/L	# 57
32) Toluene	8.65	92	1464	0.07	ug/L	90
43) P+m-Xylene	9.77	106	1759	0.12	ug/L	# 85
47) Isopropylbenzene	10.23	105	21296	0.59	ug/L	100
56) tert-butylbenzene	10.76	119	223167	7.61	ug/L	96

(#= qualifier out of range (m) = manual integration

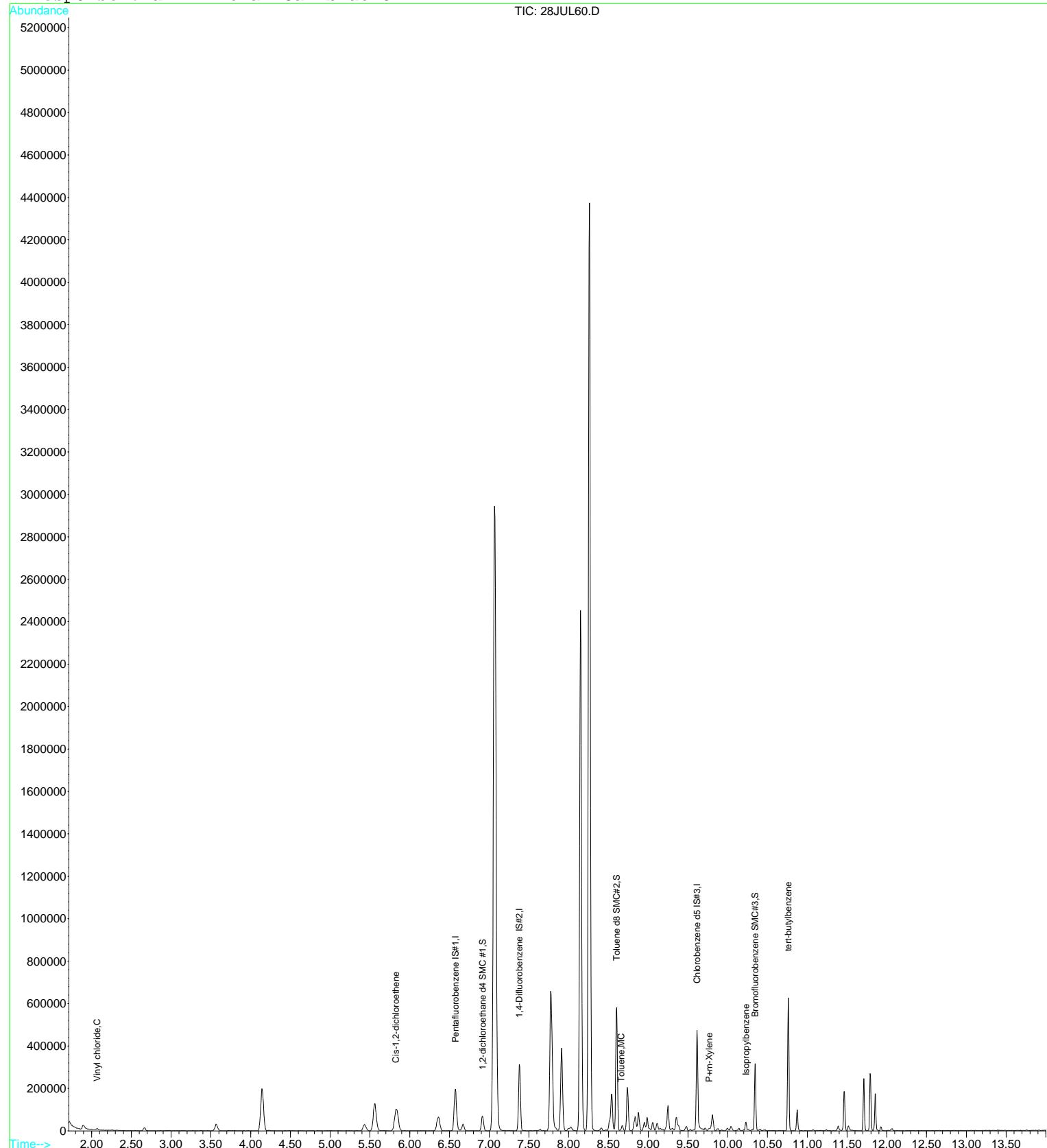
28JUL60.D 82605.M Sat Jul 29 09:26:19 2017

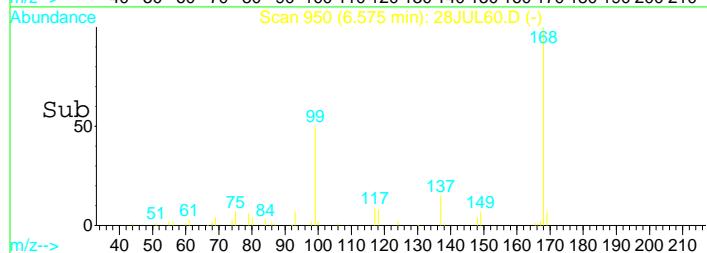
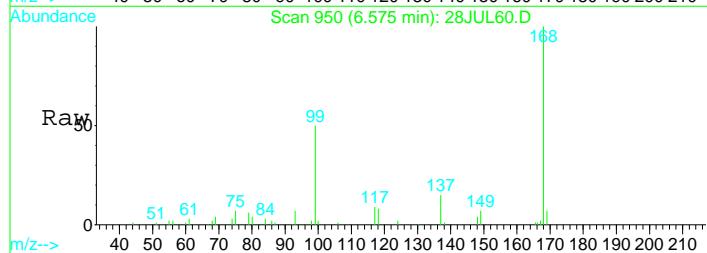
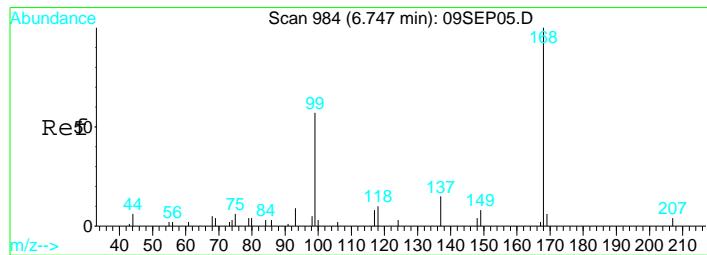
Page 1

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL60.D Vial: 60
 Acq On : 29 Jul 2017 6:07 am Operator: MGC
 Sample : 1720267-11 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:25 2017 Quant Results File: 82605.RES

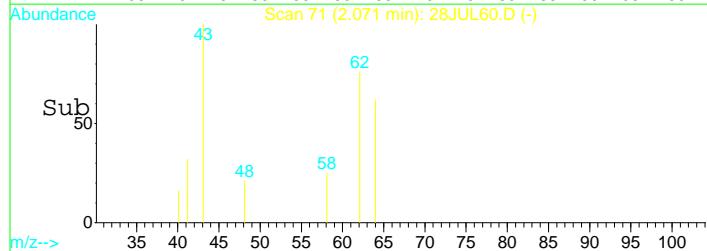
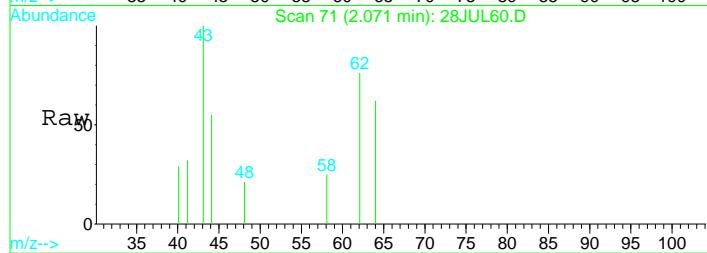
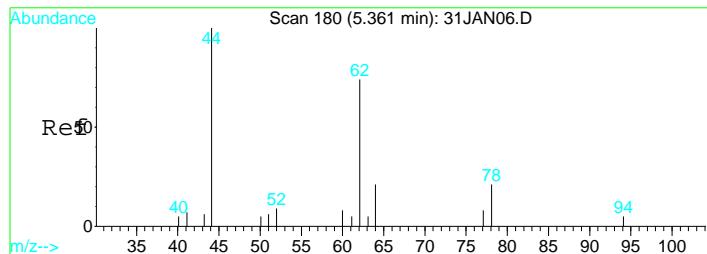
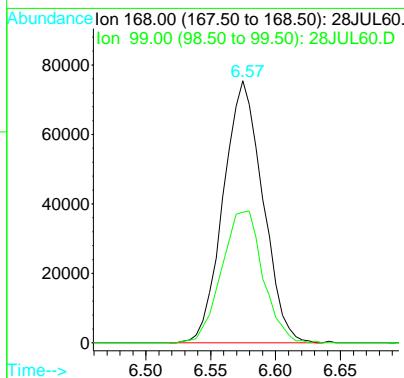
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration





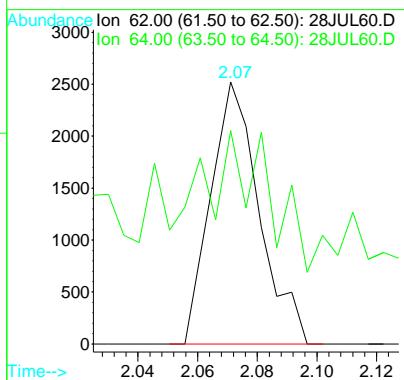
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 28JUL60.D
 Acq: 29 Jul 2017 6:07 am

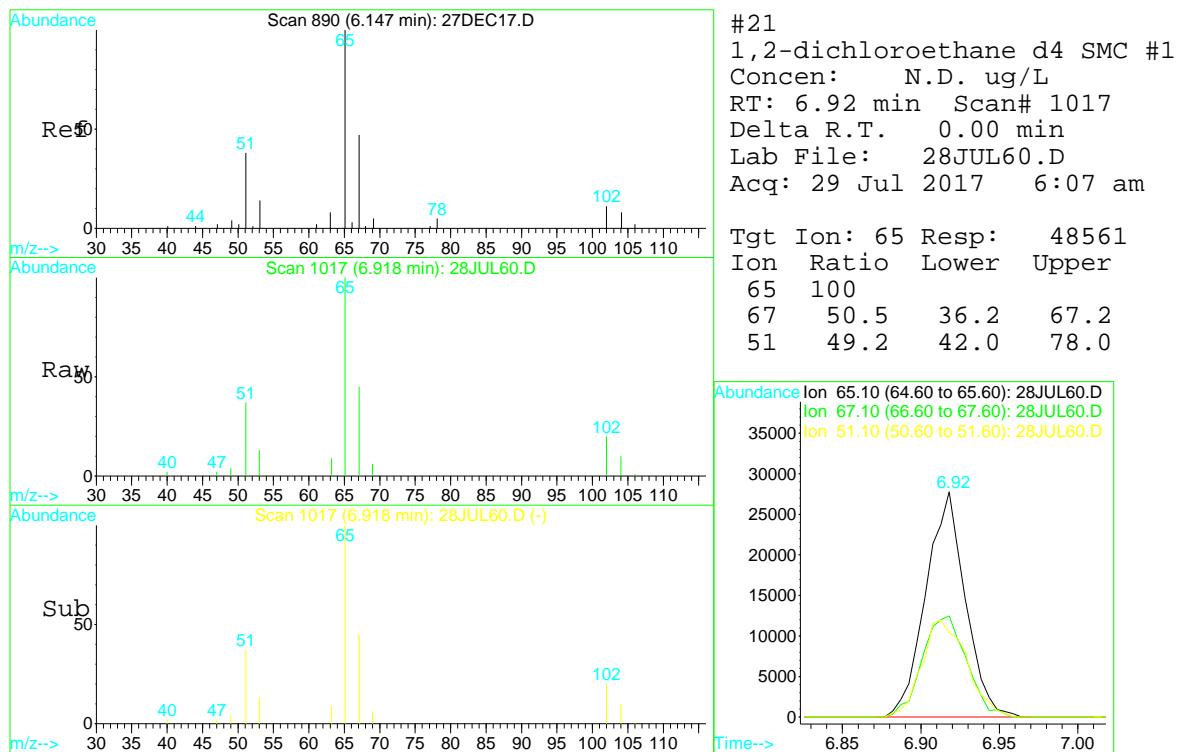
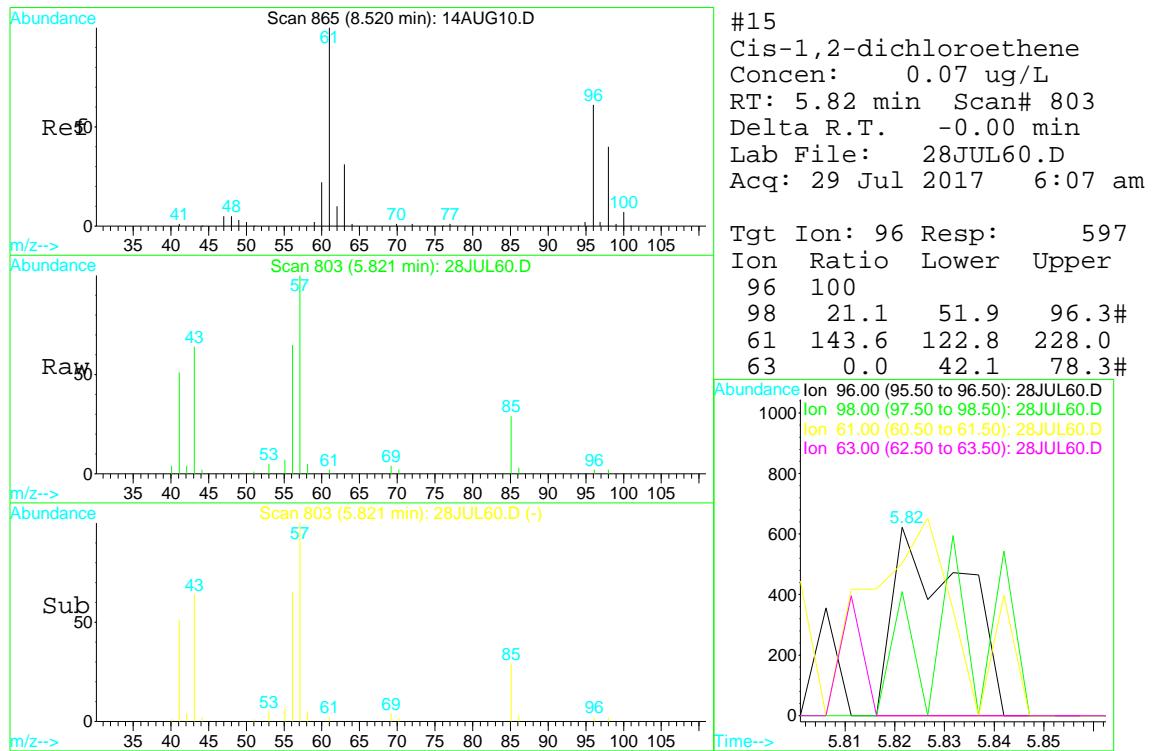
Tgt Ion: 168 Resp: 159751
 Ion Ratio Lower Upper
 168 100
 99 52.6 38.7 71.9

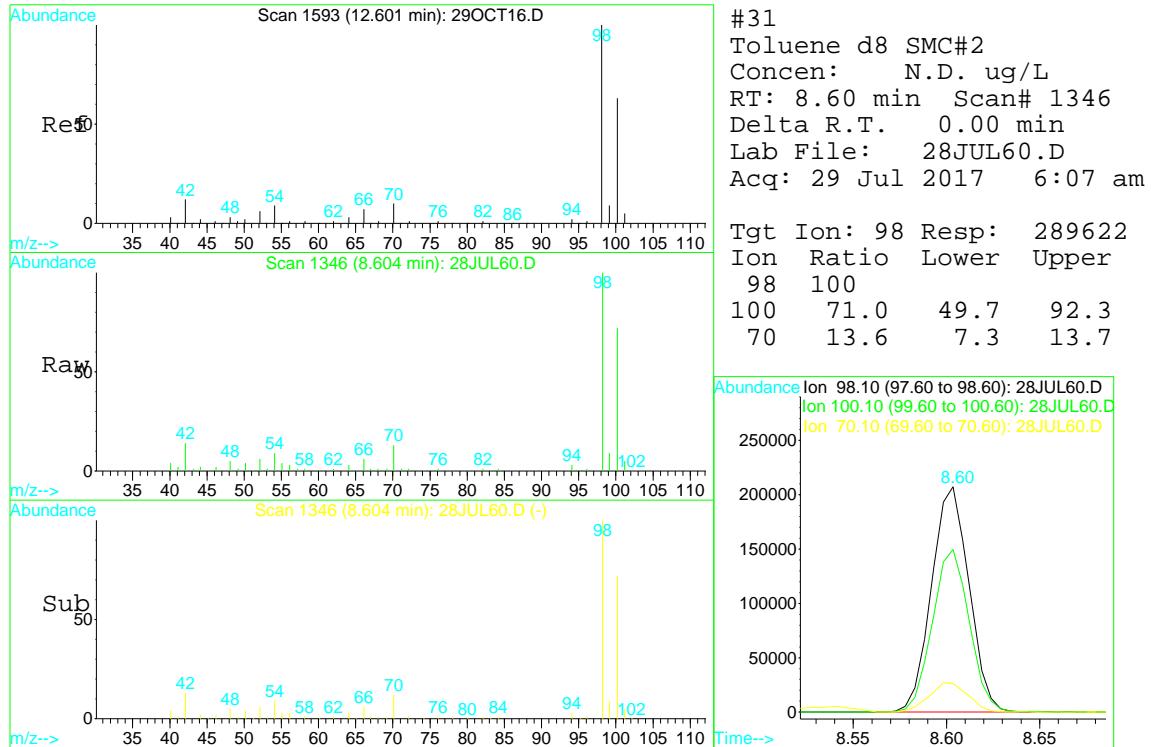
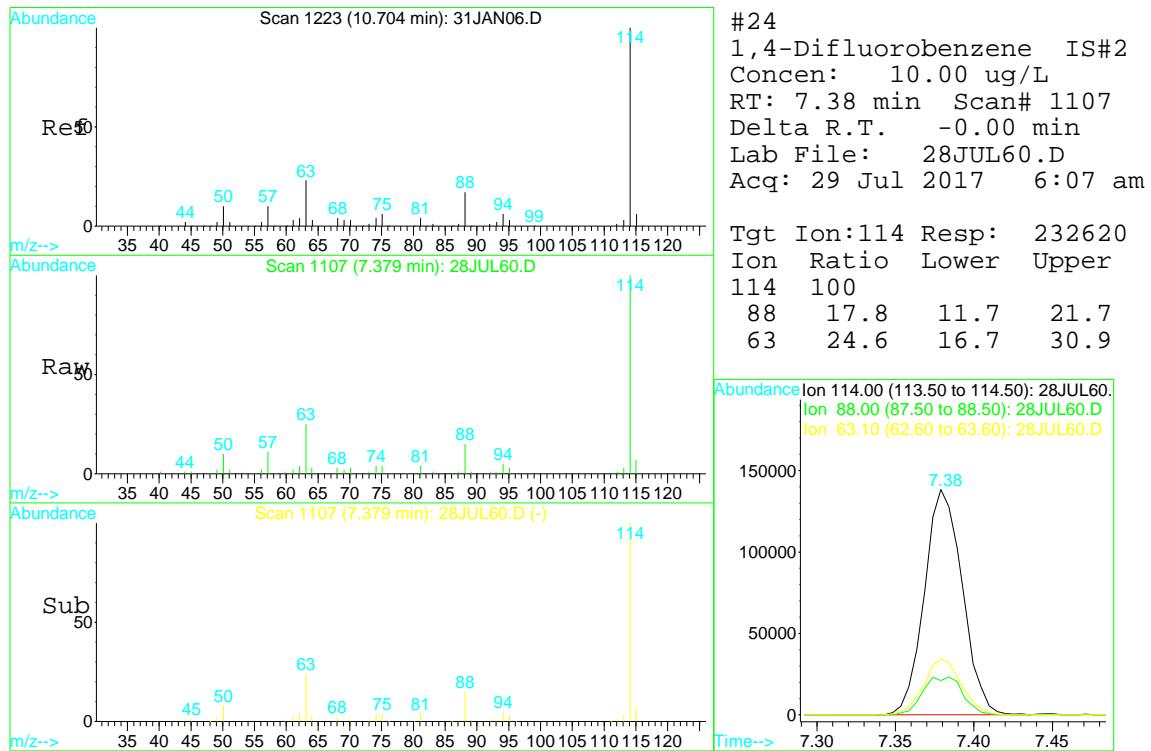


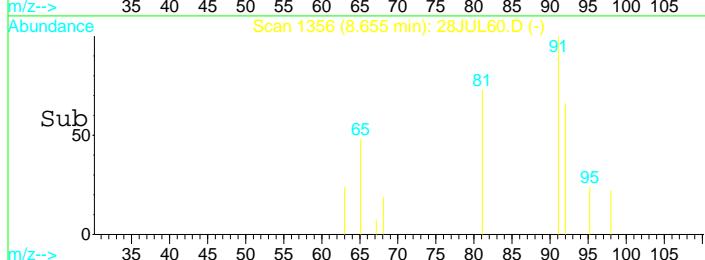
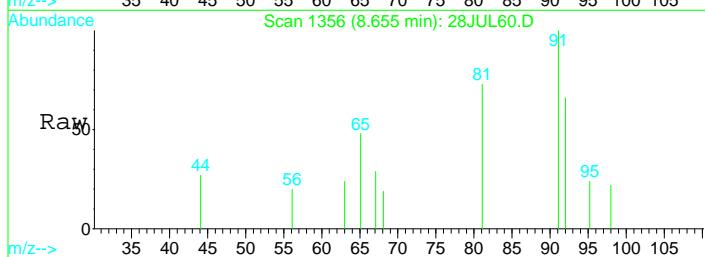
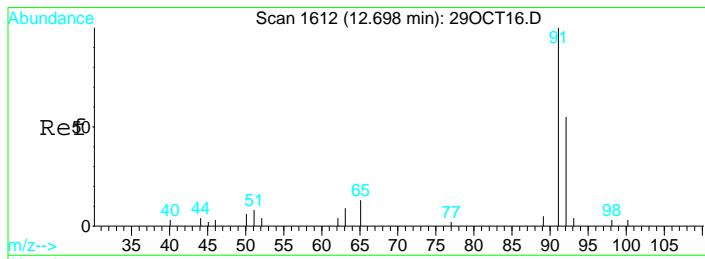
#4
 Vinyl chloride
 Concen: 0.24 ug/L
 RT: 2.07 min Scan# 71
 Delta R.T. -0.00 min
 Lab File: 28JUL60.D
 Acq: 29 Jul 2017 6:07 am

Tgt Ion: 62 Resp: 2847
 Ion Ratio Lower Upper
 62 100
 64 54.5 39.3 72.9



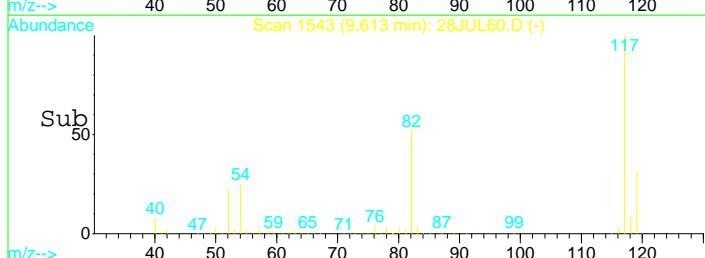
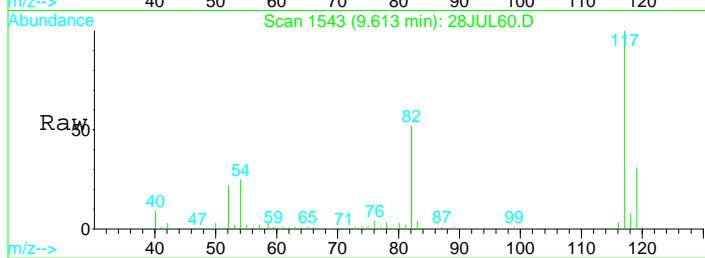
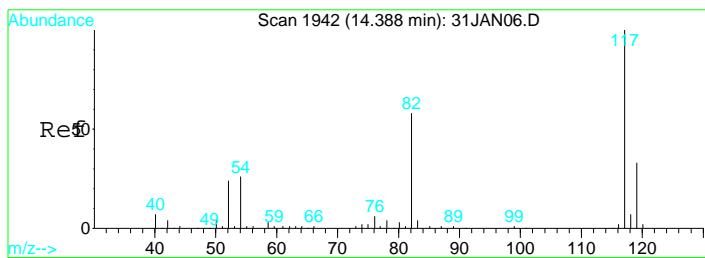
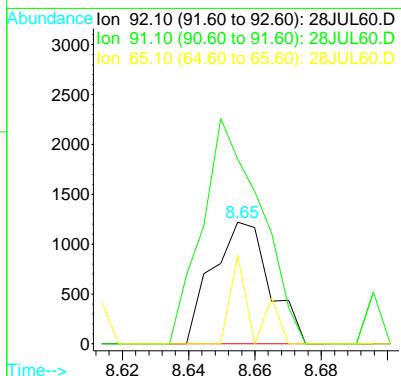






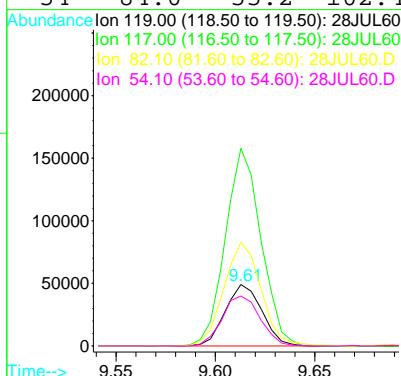
#32
 Toluene
 Concen: 0.07 ug/L
 RT: 8.65 min Scan# 1356
 Delta R.T. 0.00 min
 Lab File: 28JUL60.D
 Acq: 29 Jul 2017 6:07 am

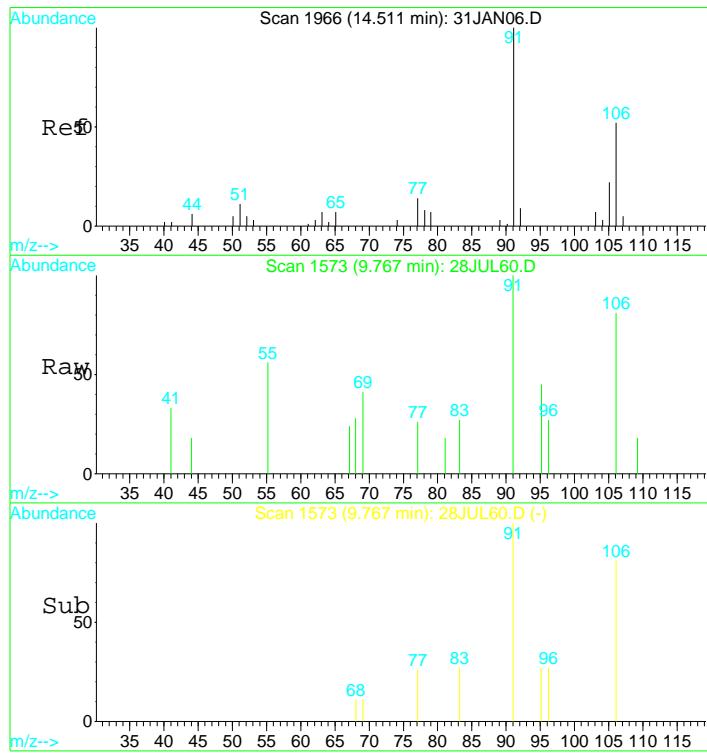
Tgt Ion: 92 Resp: 1464
 Ion Ratio Lower Upper
 92 100
 91 188.7 122.6 227.6
 65 28.3 16.5 30.7



#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.61 min Scan# 1543
 Delta R.T. -0.00 min
 Lab File: 28JUL60.D
 Acq: 29 Jul 2017 6:07 am

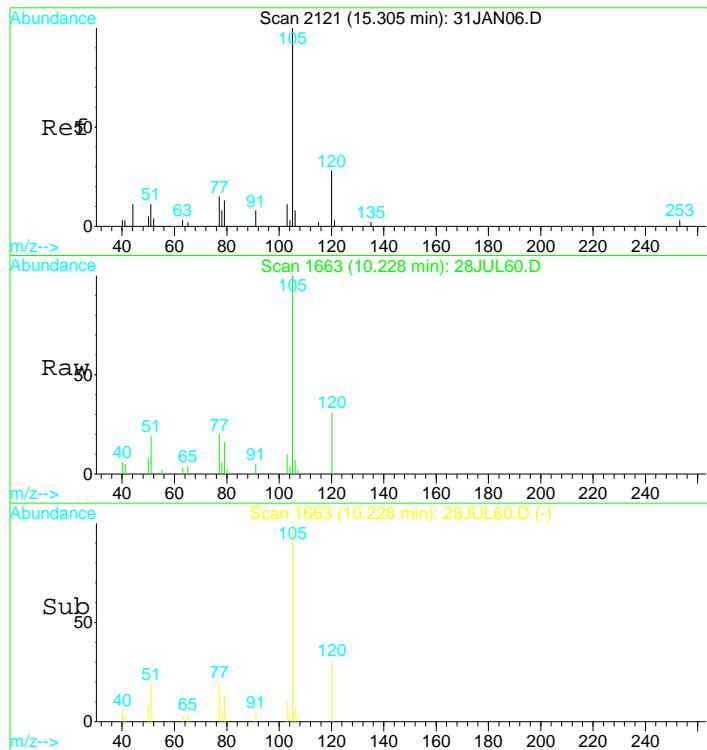
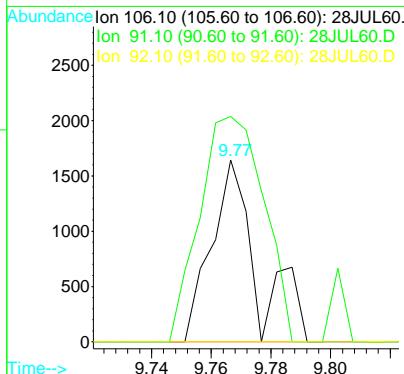
Tgt Ion: 119 Resp: 62913
 Ion Ratio Lower Upper
 119 100
 117 311.7 214.5 398.4
 82 171.4 117.7 218.7
 54 84.0 55.2 102.4





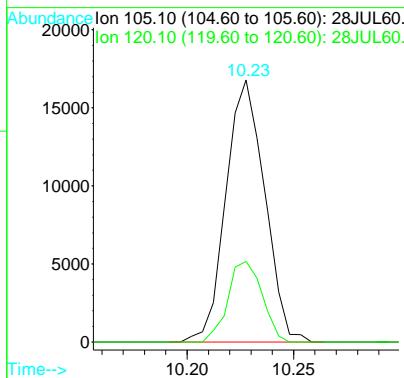
#43
P+m-Xylene
Concen: 0.12 ug/L
RT: 9.77 min Scan# 1573
Delta R.T. -0.00 min
Lab File: 28JUL60.D
Acq: 29 Jul 2017 6:07 am

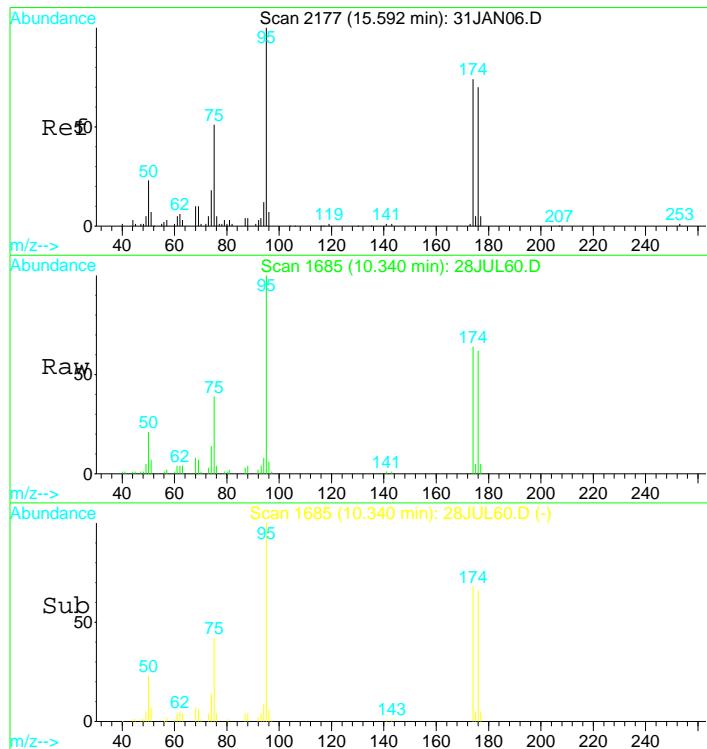
Tgt Ion: 106 Resp: 1759
Ion Ratio Lower Upper
106 100
91 173.7 135.0 250.6
92 0.0 10.3 19.1#



#47
Isopropylbenzene
Concen: 0.59 ug/L
RT: 10.23 min Scan# 1663
Delta R.T. -0.00 min
Lab File: 28JUL60.D
Acq: 29 Jul 2017 6:07 am

Tgt Ion: 105 Resp: 21296
Ion Ratio Lower Upper
105 100
120 27.2 19.2 35.6

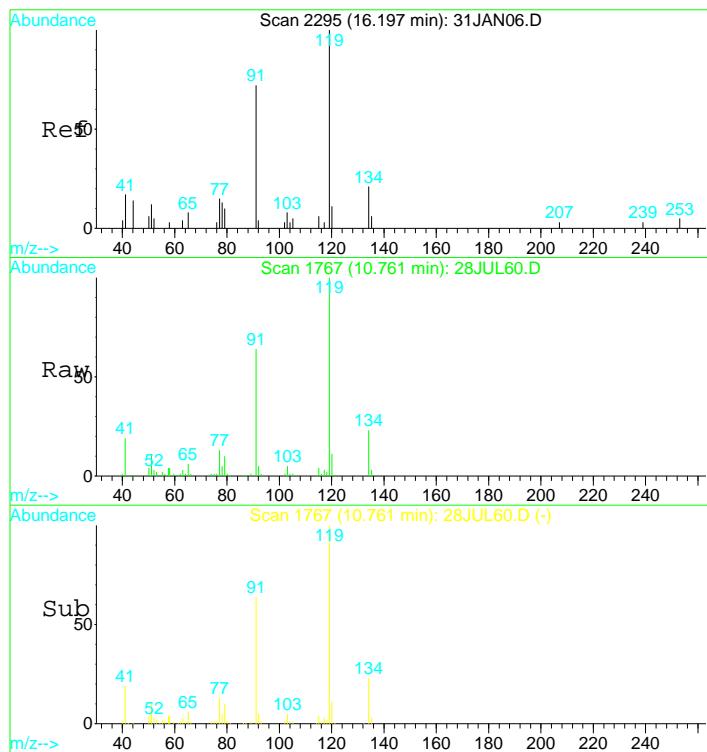
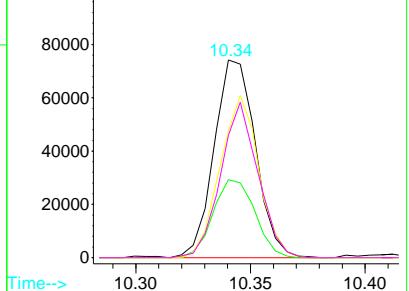




#49
 Bromofluorobenzene SMC#3
 Concen: N.D. ug/L
 RT: 10.34 min Scan# 1685
 Delta R.T. -0.00 min
 Lab File: 28JUL60.D
 Acq: 29 Jul 2017 6:07 am

Tgt Ion: 95 Resp: 92968
 Ion Ratio Lower Upper
 95 100
 75 40.1 29.5 54.7
 174 76.5 52.3 97.1
 176 71.0 49.6 92.2

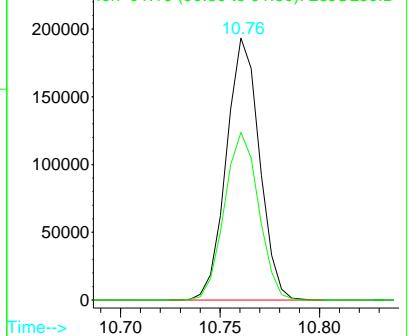
Abundance
 Ion 95.00 (94.50 to 95.50): 28JUL60.D
 Ion 75.00 (74.50 to 75.50): 28JUL60.D
 Ion 173.90 (173.40 to 174.40): 28JUL60.D
 Ion 175.90 (175.40 to 176.40): 28JUL60.D



#56
 tert-butylbenzene
 Concen: 7.61 ug/L
 RT: 10.76 min Scan# 1767
 Delta R.T. -0.00 min
 Lab File: 28JUL60.D
 Acq: 29 Jul 2017 6:07 am

Tgt Ion: 119 Resp: 223167
 Ion Ratio Lower Upper
 119 100
 91 66.0 48.7 90.5

Abundance
 Ion 119.10 (118.60 to 119.60): 28JUL60.D
 Ion 91.10 (90.60 to 91.60): 28JUL60.D



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL60.D Vial: 60
Acq On : 29 Jul 2017 6:07 am Operator: MGC
Sample : 1720267-11 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 29 9:31 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)

Title : EPA Method 624/8260

Last Update : Fri Jul 21 04:19:15 2017

Response via : Initial Calibration

DataAcq Meth : 82605

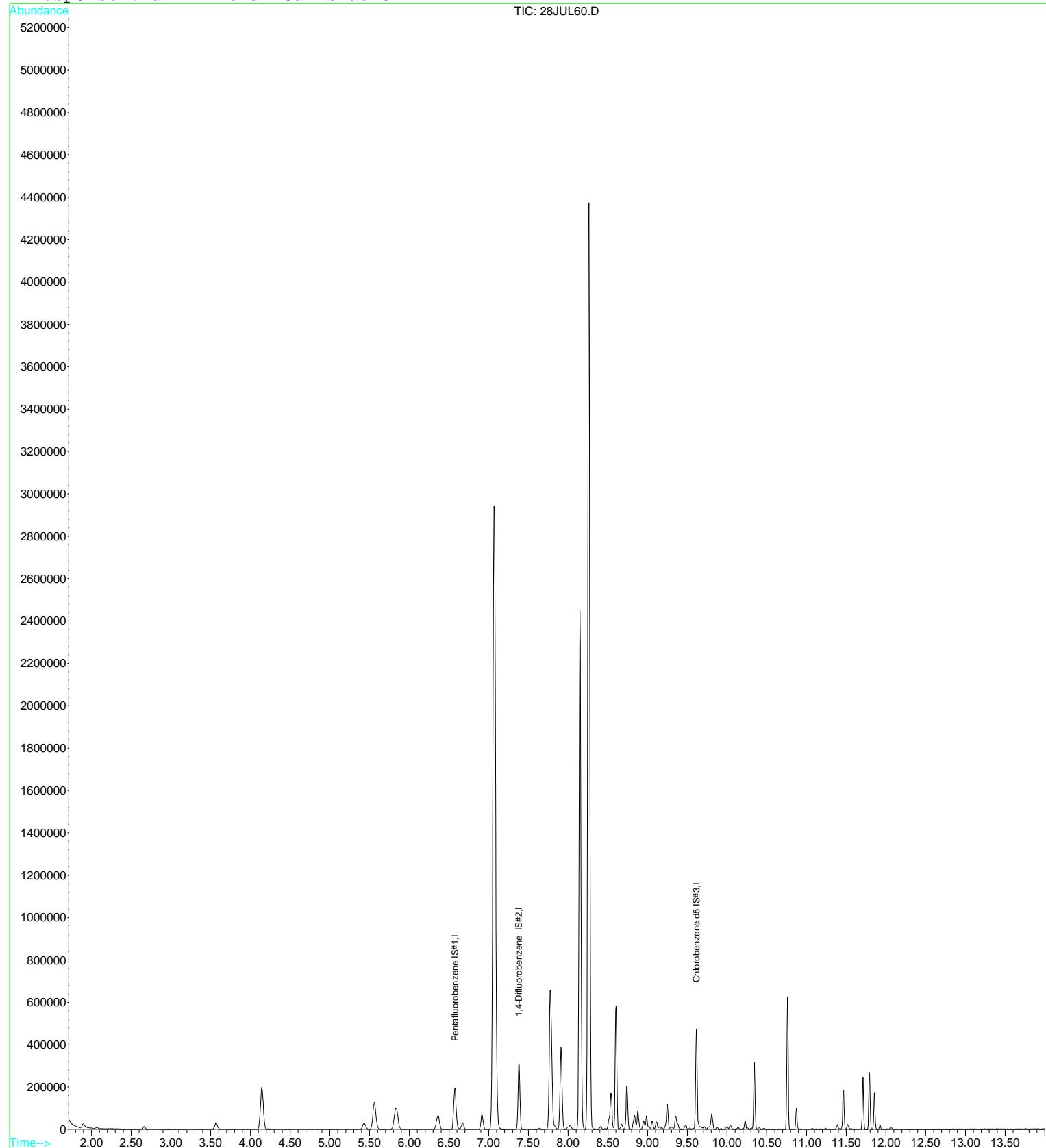
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----	-----	-----	-----	-----	-----	-----
1) Pentafluorobenzene IS#1	6.57	168	159751	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	232620	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	62913	10.00	ug/L	0.00

Target Compounds	Qvalue
-----	-----

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL60.D Vial: 60
Acq On : 29 Jul 2017 6:07 am Operator: MGC
Sample : 1720267-11 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:31 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL68.D Vial: 68
 Acq On : 29 Jul 2017 9:11 am Operator: MGC
 Sample : 1720267-12 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multipllr: 1.00

MS Integration Params: rteint.p
 Quant Time: Jul 29 9:42 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	159019	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	231425	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	62697	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	49427	10.64	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	106.40%
31) Toluene d8 SMC#2	8.60	98	275236	9.63	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.30%
49) Bromofluorobenzene SMC#3	10.34	95	89221	9.53	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	95.30%

Target Compounds

					Qvalue
4) Vinyl chloride	2.07	62	5032	0.42	ug/L 100
12) T-1,2-dichloroethene	4.51	96	4996	0.63	ug/L 86
13) 1,1-Dichloroethane	5.06	63	3481	0.20	ug/L 91
15) Cis-1,2-dichloroethene	5.82	96	31871	3.84	ug/L 92
25) Trichloroethene	7.60	130	8935	1.12	ug/L 84
32) Toluene	8.65	92	2189	0.11	ug/L # 87
43) P+m-Xylene	9.77	106	1797	0.12	ug/L 96
44) O-Xylene	10.01	106	715	0.05	ug/L # 71
68) naphthalene	12.26	128	791	0.08	ug/L 100

(#) = qualifier out of range (m) = manual integration

28JUL68.D 82605.M Sat Jul 29 09:43:04 2017

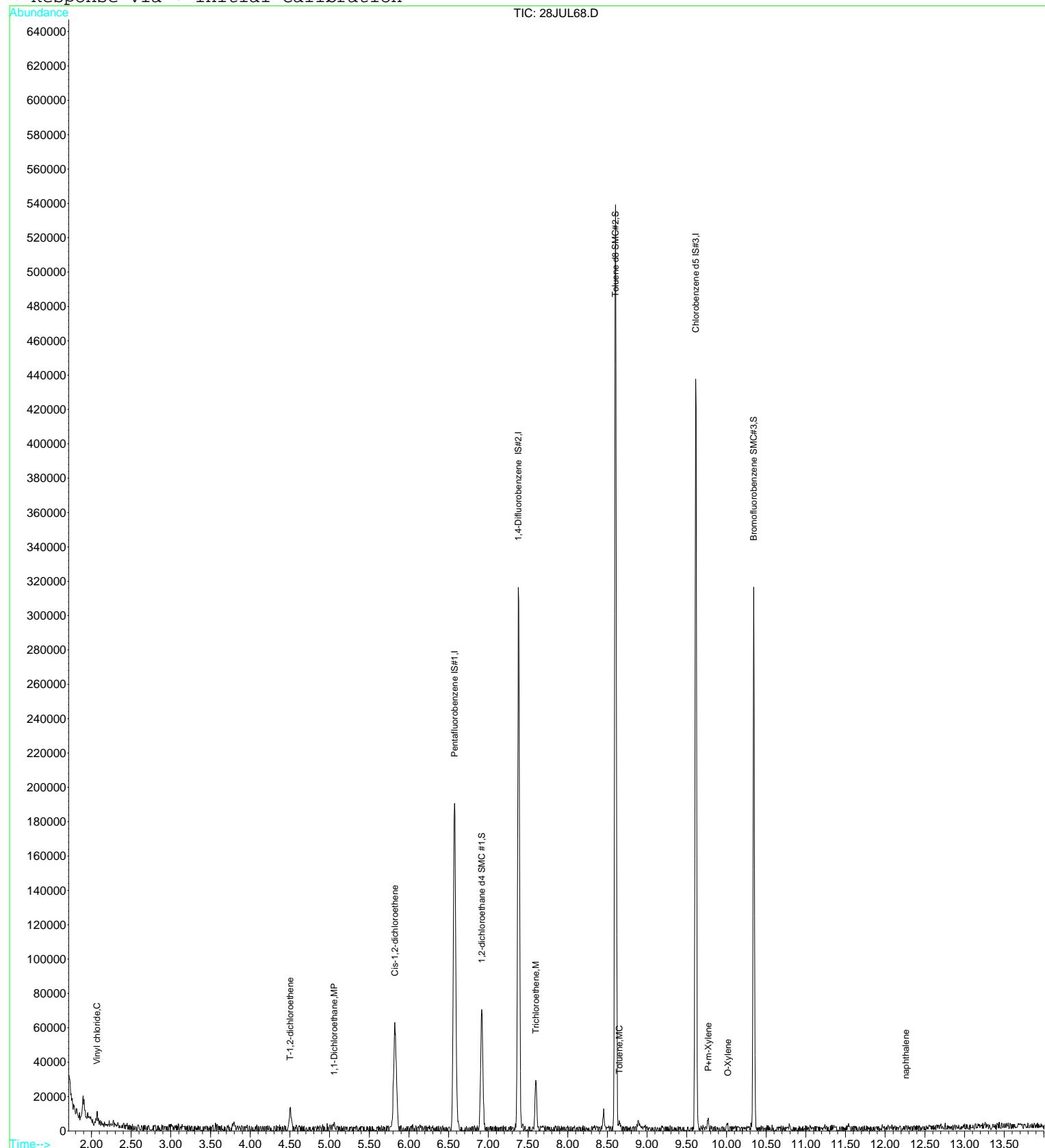
Page 1

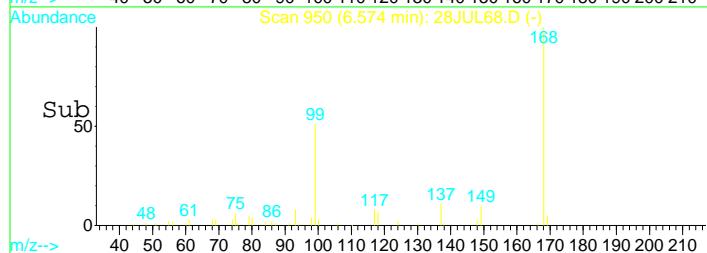
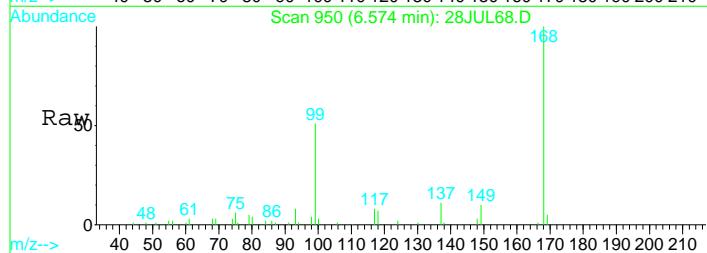
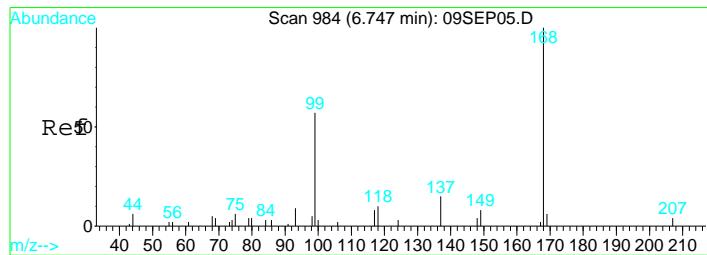
BC Laboratories, Inc, Page 439 of 925

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL68.D Vial: 68
 Acq On : 29 Jul 2017 9:11 am Operator: MGC
 Sample : 1720267-12 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:42 2017 Quant Results File: 82605.RES

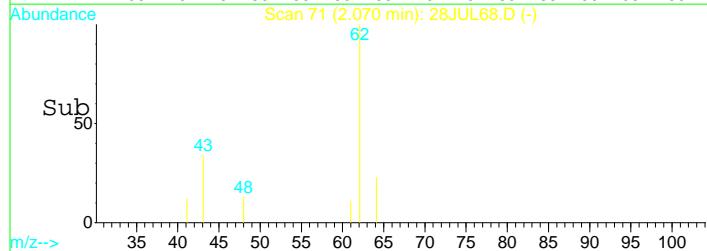
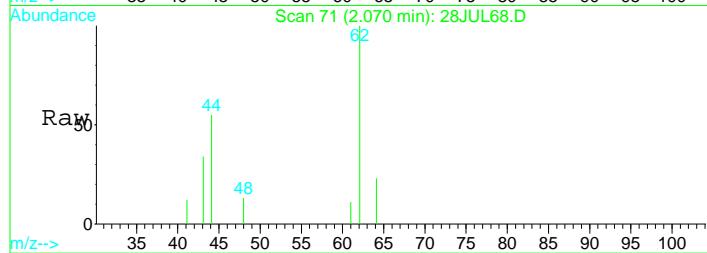
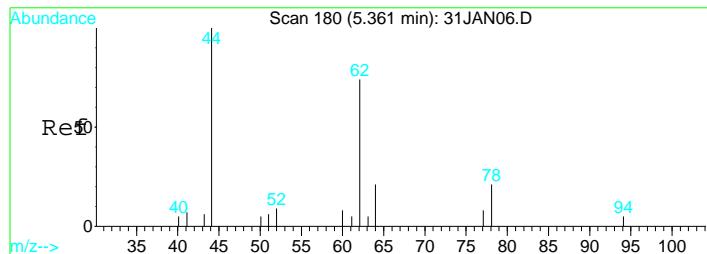
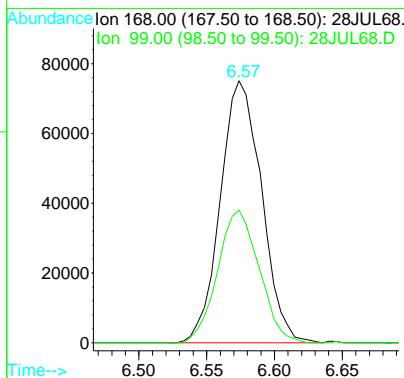
Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration





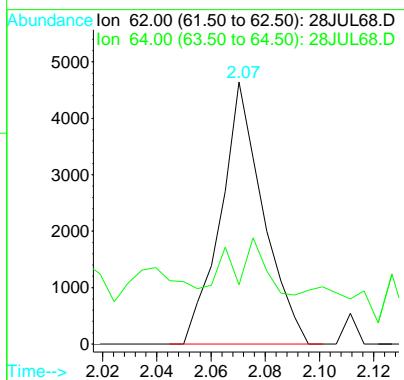
#1
 Pentafluorobenzene IS#1
 Concen: 10.00 ug/L
 RT: 6.57 min Scan# 950
 Delta R.T. -0.00 min
 Lab File: 28JUL68.D
 Acq: 29 Jul 2017 9:11 am

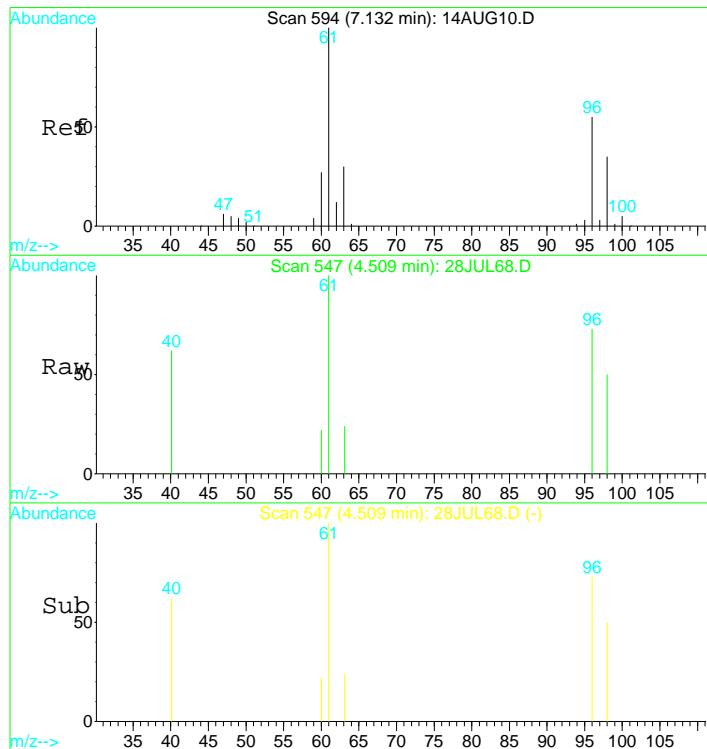
Tgt Ion: 168 Resp: 159019
 Ion Ratio Lower Upper
 168 100
 99 50.8 38.7 71.9



#4
 Vinyl chloride
 Concen: 0.42 ug/L
 RT: 2.07 min Scan# 71
 Delta R.T. -0.00 min
 Lab File: 28JUL68.D
 Acq: 29 Jul 2017 9:11 am

Tgt Ion: 62 Resp: 5032
 Ion Ratio Lower Upper
 62 100
 64 55.9 39.3 72.9

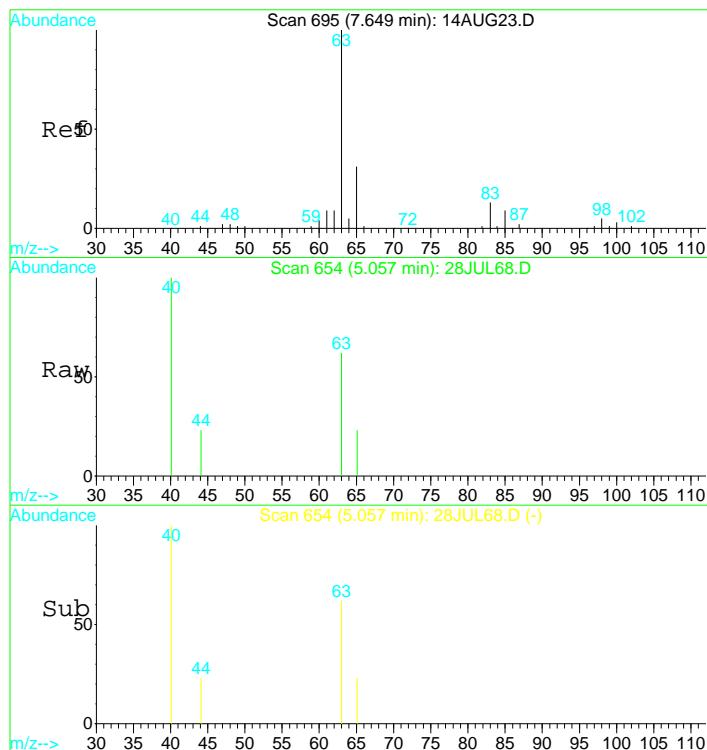
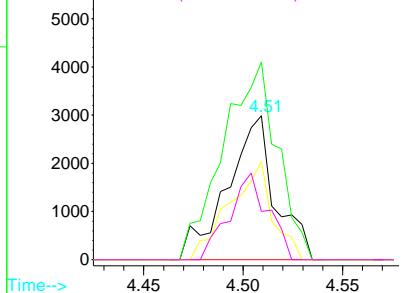




#12
 T-1,2-dichloroethene
 Concen: 0.63 ug/L
 RT: 4.51 min Scan# 547
 Delta R.T. 0.01 min
 Lab File: 28JUL68.D
 Acq: 29 Jul 2017 9:11 am

Tgt Ion: 96 Resp: 4996
 Ion Ratio Lower Upper
 96 100
 61 156.5 129.4 240.4
 98 60.9 41.5 77.1
 63 49.1 39.3 73.1

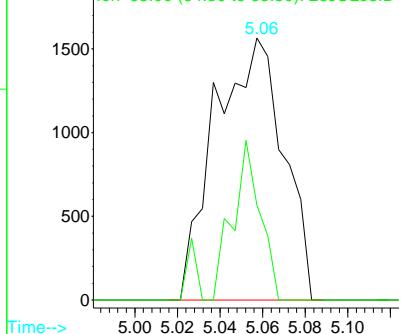
Abundance
 Ion 96.00 (95.50 to 96.50): 28JUL68.D
 Ion 61.00 (60.50 to 61.50): 28JUL68.D
 Ion 98.00 (97.50 to 98.50): 28JUL68.D
 Ion 63.00 (62.50 to 63.50): 28JUL68.D

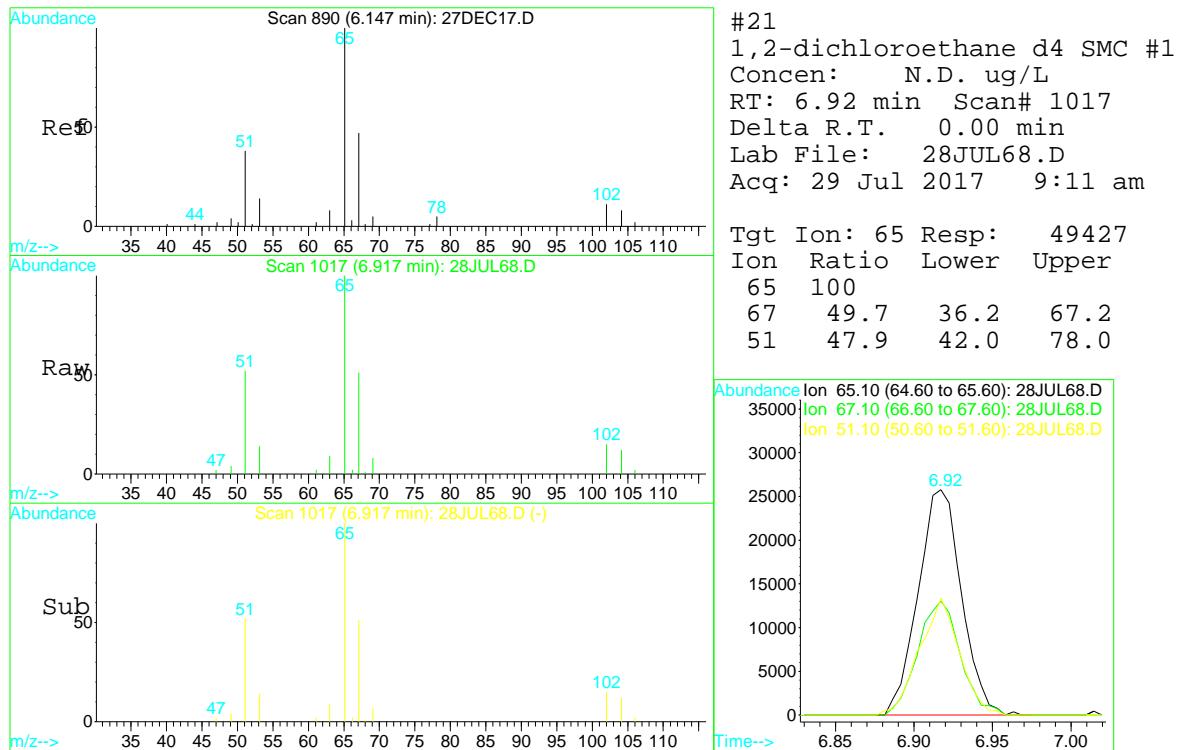
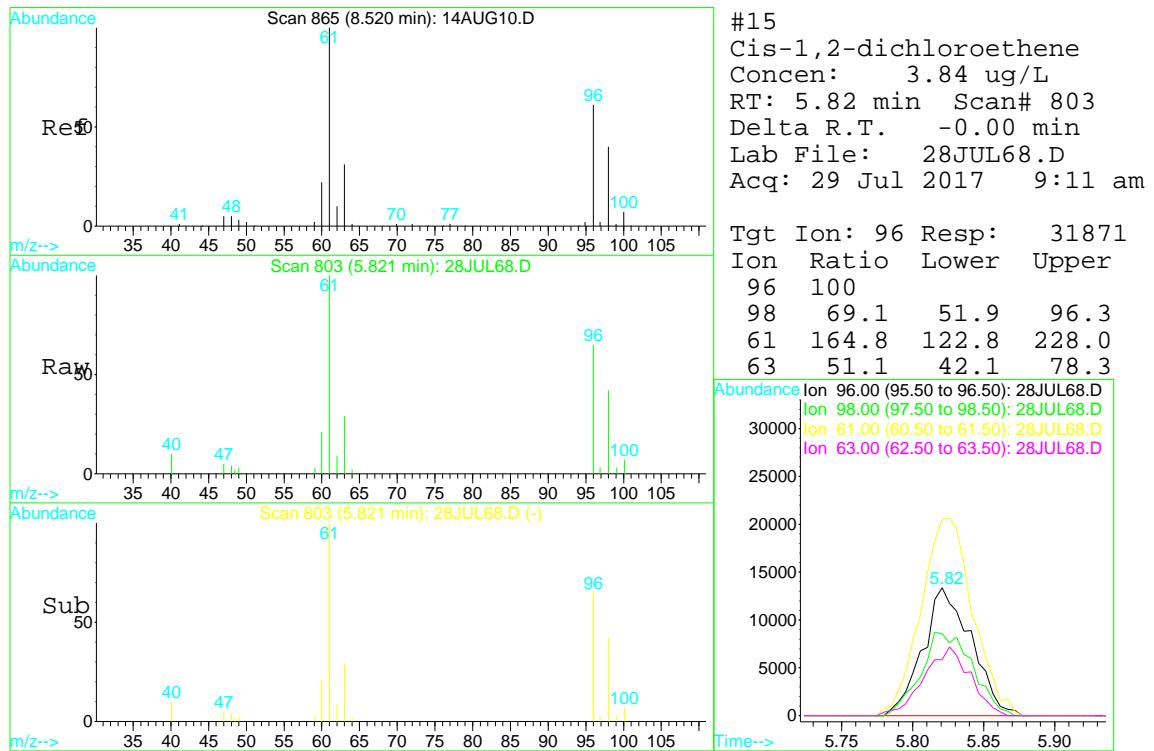


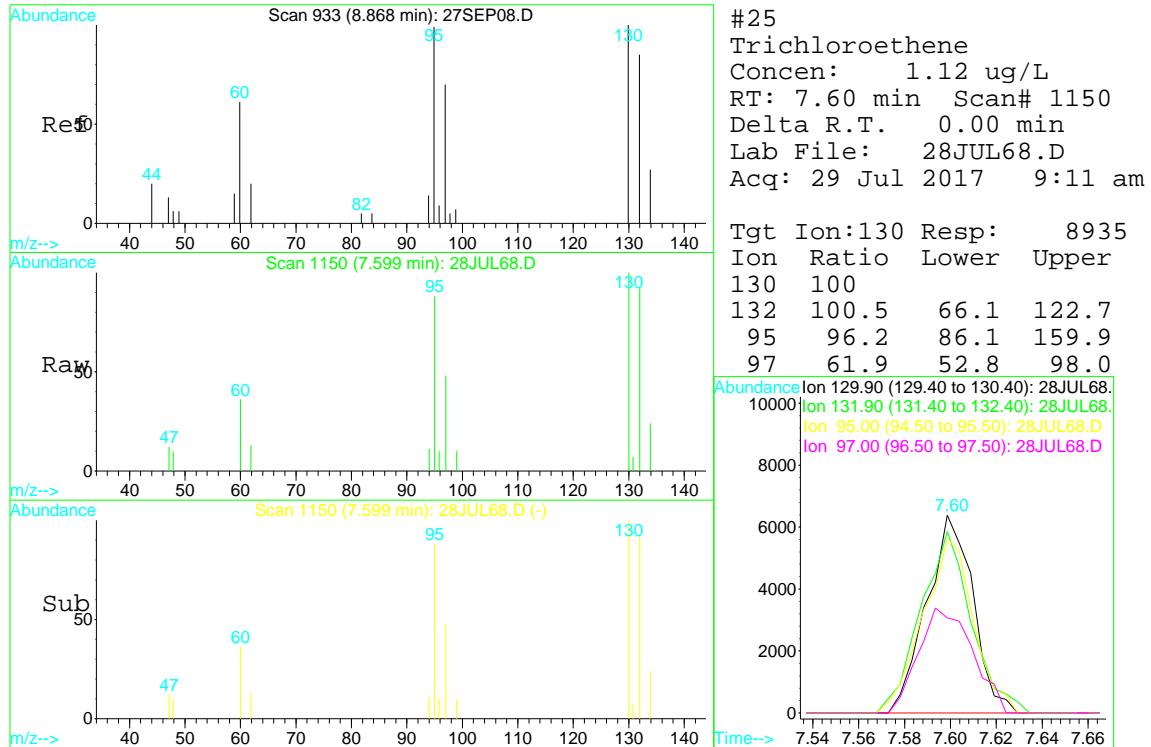
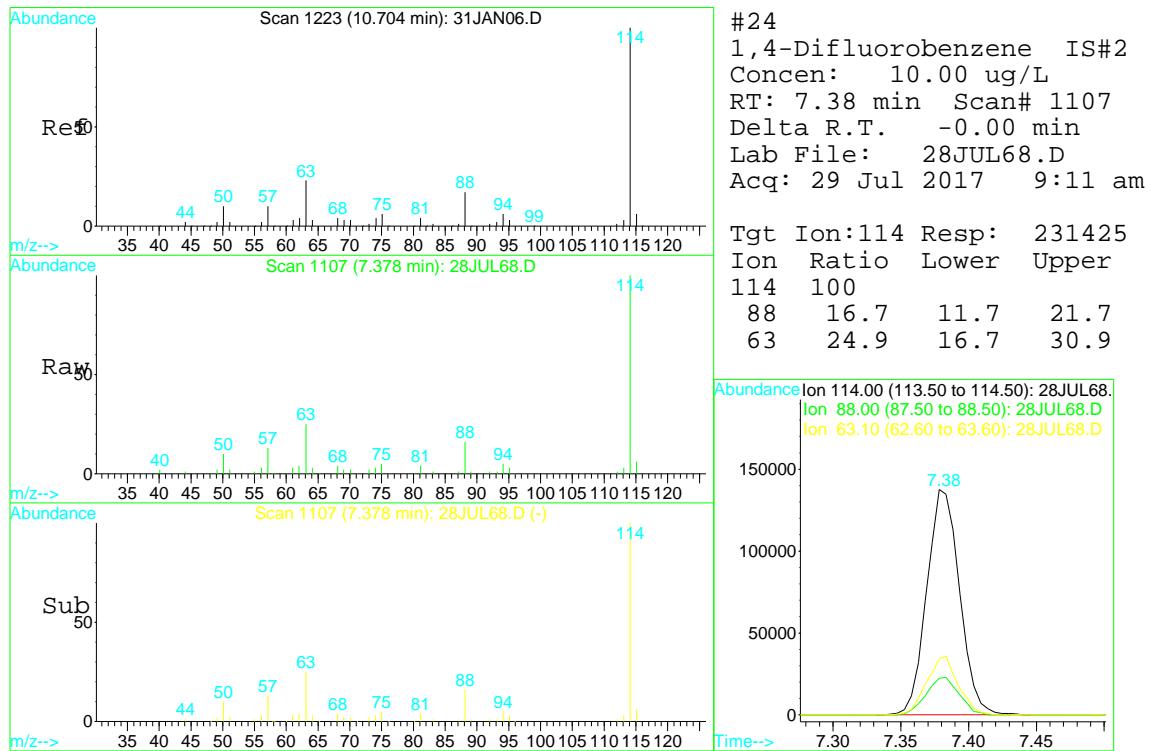
#13
 1,1-Dichloroethane
 Concen: 0.20 ug/L
 RT: 5.06 min Scan# 654
 Delta R.T. 0.01 min
 Lab File: 28JUL68.D
 Acq: 29 Jul 2017 9:11 am

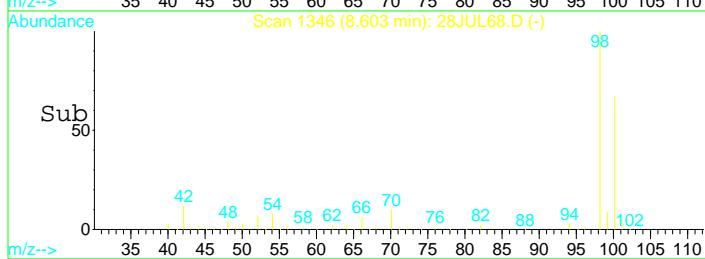
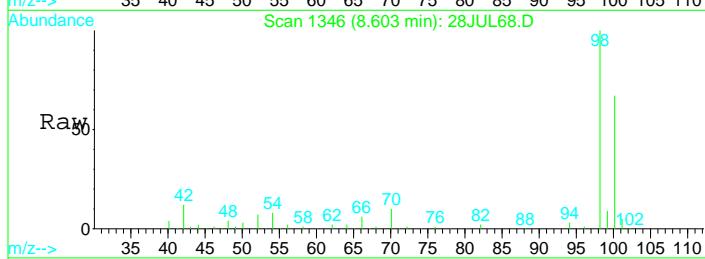
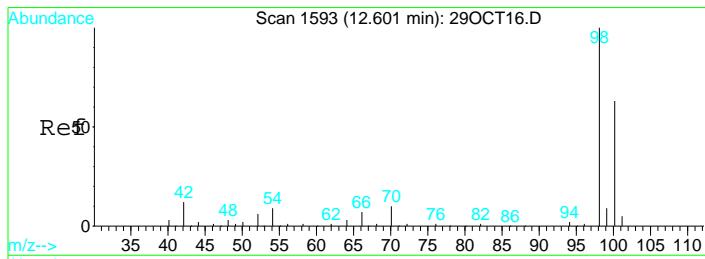
Tgt Ion: 63 Resp: 3481
 Ion Ratio Lower Upper
 63 100
 65 24.8 20.8 38.6

Abundance
 Ion 63.00 (62.50 to 63.50): 28JUL68.D
 Ion 65.00 (64.50 to 65.50): 28JUL68.D



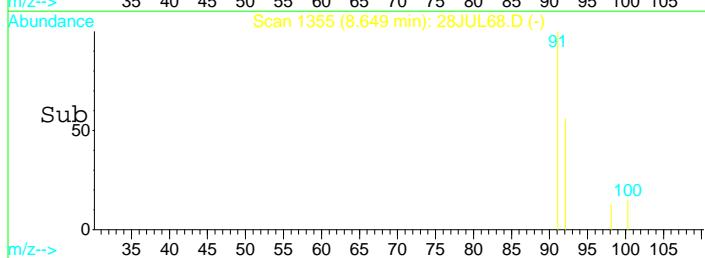
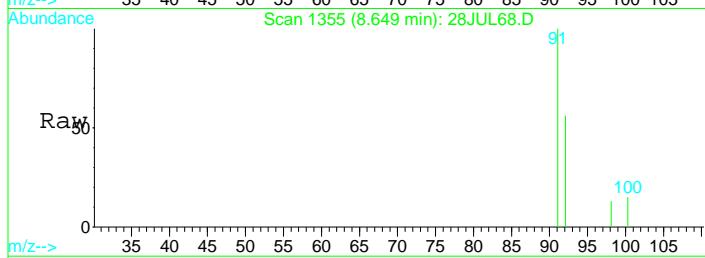
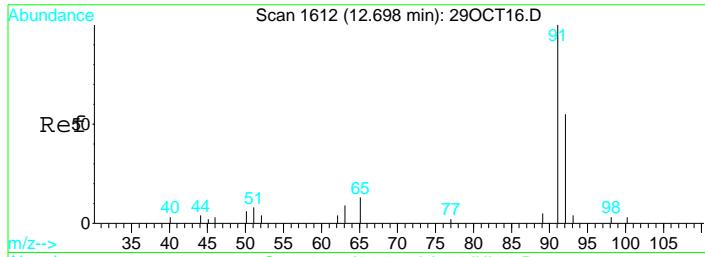
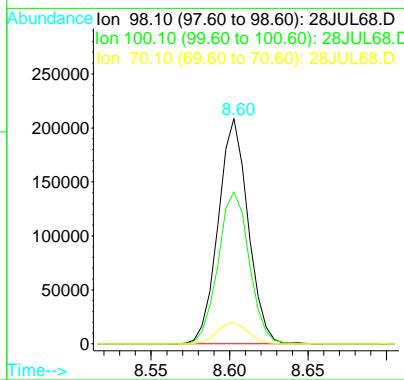






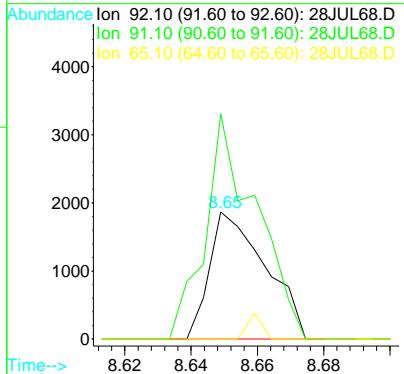
#31
 Toluene d8 SMC#2
 Concen: N.D. ug/L
 RT: 8.60 min Scan# 1346
 Delta R.T. 0.00 min
 Lab File: 28JUL68.D
 Acq: 29 Jul 2017 9:11 am

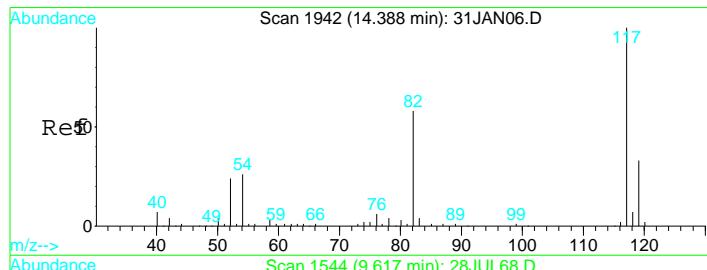
Tgt Ion: 98 Resp: 275236
 Ion Ratio Lower Upper
 98 100
 100 70.3 49.7 92.3
 70 9.8 7.3 13.7



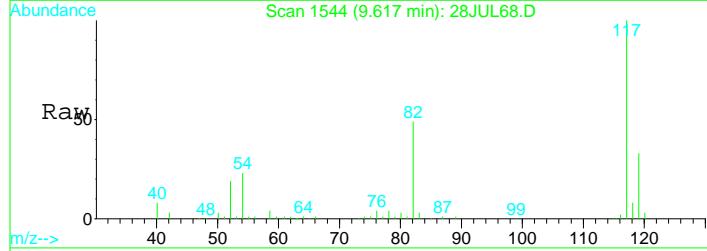
#32
 Toluene
 Concen: 0.11 ug/L
 RT: 8.65 min Scan# 1355
 Delta R.T. -0.00 min
 Lab File: 28JUL68.D
 Acq: 29 Jul 2017 9:11 am

Tgt Ion: 92 Resp: 2189
 Ion Ratio Lower Upper
 92 100
 91 160.8 122.6 227.6
 65 5.3 16.5 30.7#

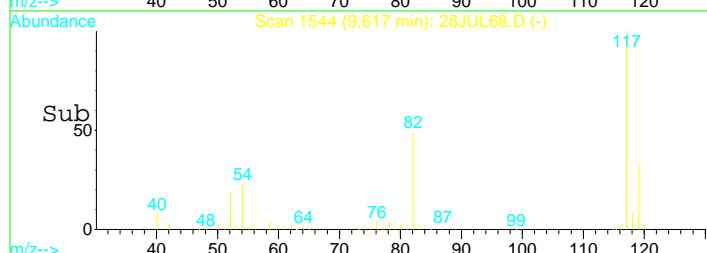




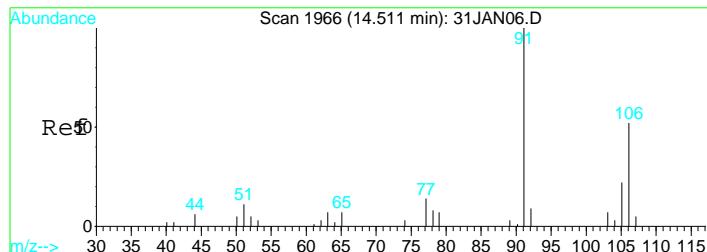
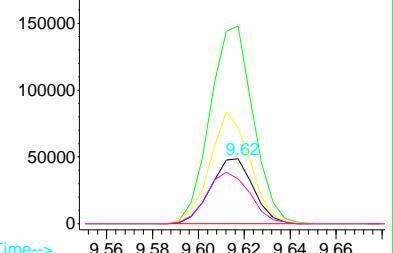
#39
 Chlorobenzene d5 IS#3
 Concen: 10.00 ug/L
 RT: 9.62 min Scan# 1544
 Delta R.T. 0.00 min
 Lab File: 28JUL68.D
 Acq: 29 Jul 2017 9:11 am



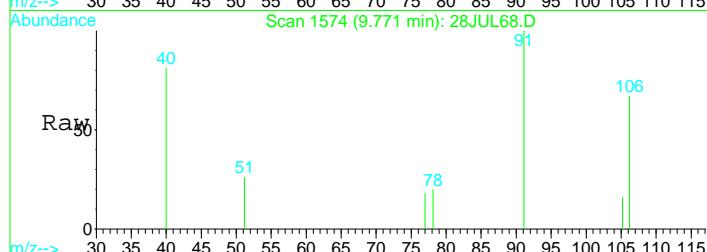
Tgt Ion:119 Resp: 62697
 Ion Ratio Lower Upper
 119 100
 117 308.1 214.5 398.4
 82 162.5 117.7 218.7
 54 80.7 55.2 102.4



Abundance
 Ion 119.00 (118.50 to 119.50): 28JUL68.
 Ion 117.00 (116.50 to 117.50): 28JUL68.
 Ion 82.10 (81.60 to 82.60): 28JUL68.D
 Ion 54.10 (53.60 to 54.60): 28JUL68.D

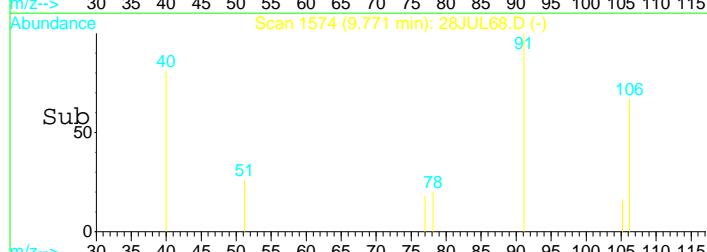
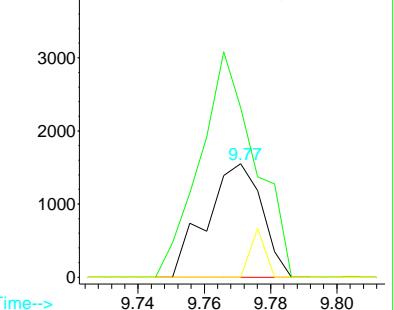


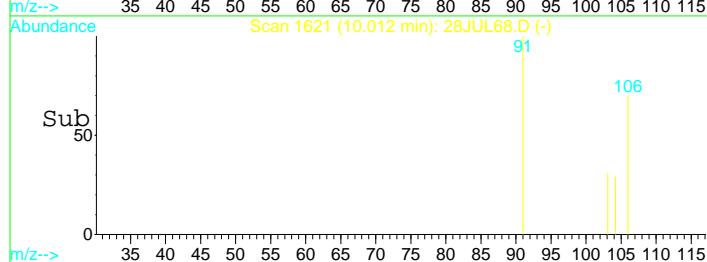
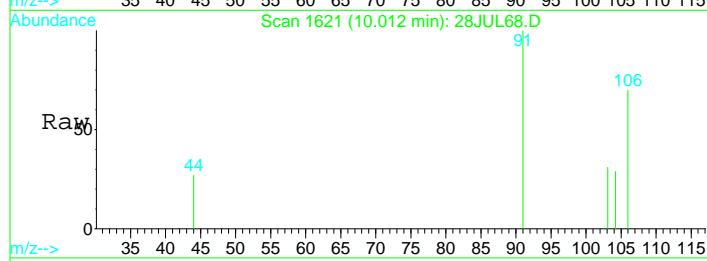
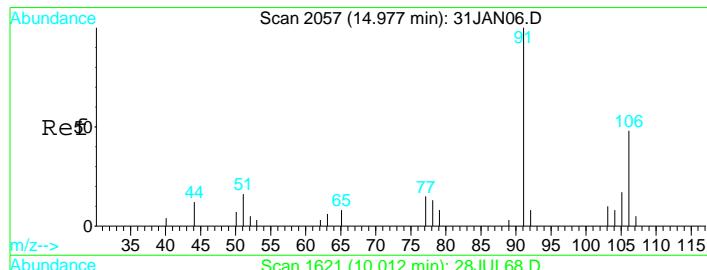
#43
 P+m-Xylene
 Concen: 0.12 ug/L
 RT: 9.77 min Scan# 1574
 Delta R.T. 0.00 min
 Lab File: 28JUL68.D
 Acq: 29 Jul 2017 9:11 am



Tgt Ion:106 Resp: 1797
 Ion Ratio Lower Upper
 106 100
 91 198.3 135.0 250.6
 92 11.5 10.3 19.1

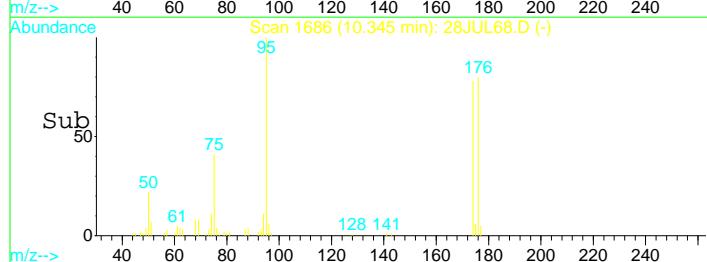
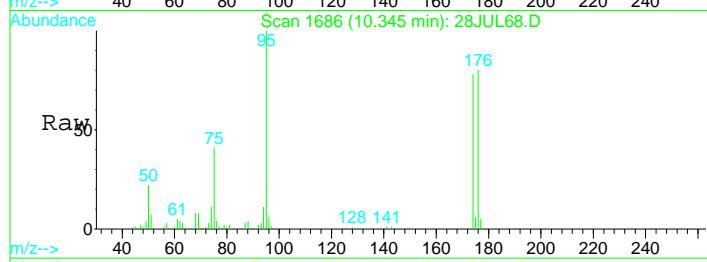
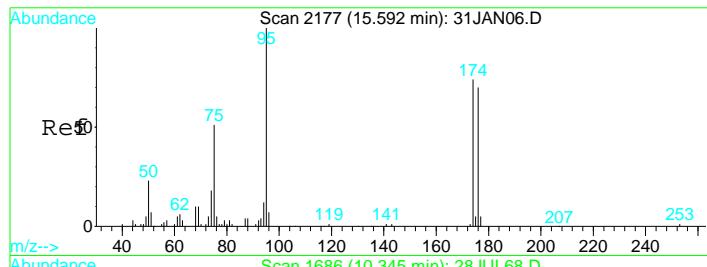
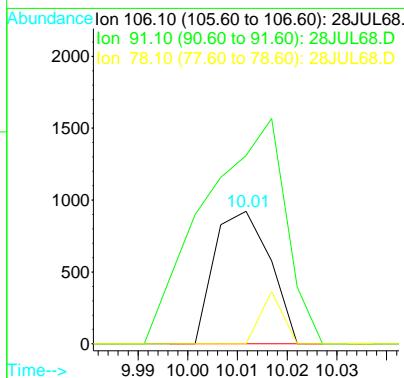
Abundance
 Ion 106.10 (105.60 to 106.60): 28JUL68.
 Ion 91.10 (90.60 to 91.60): 28JUL68.D
 Ion 92.10 (91.60 to 92.60): 28JUL68.D





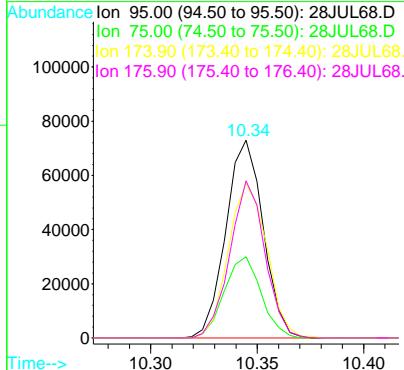
#44
O-Xylene
Concen: 0.05 ug/L
RT: 10.01 min Scan# 1621
Delta R.T. 0.00 min
Lab File: 28JUL68.D
Acq: 29 Jul 2017 9:11 am

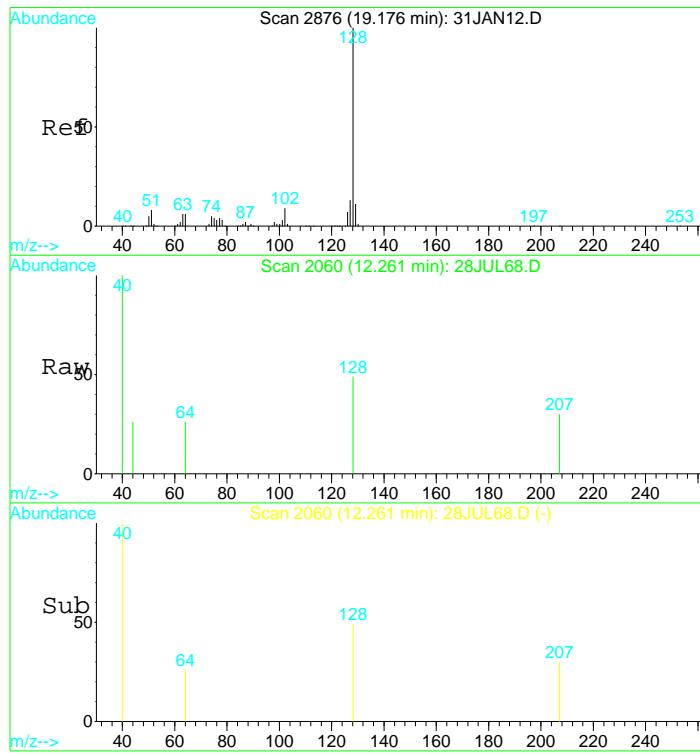
Tgt Ion: 106 Resp: 715
Ion Ratio Lower Upper
106 100
91 248.8 154.3 286.5
78 15.7 47.1 87.5#



#49
Bromofluorobenzene SMC#3
Concen: N.D. ug/L
RT: 10.34 min Scan# 1686
Delta R.T. 0.00 min
Lab File: 28JUL68.D
Acq: 29 Jul 2017 9:11 am

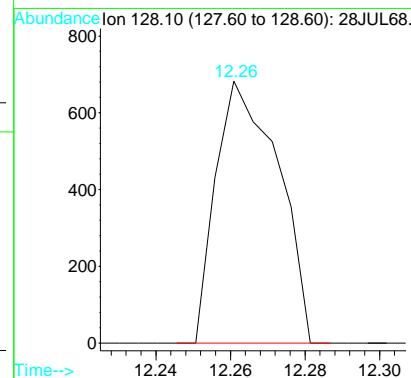
Tgt Ion: 95 Resp: 89221
Ion Ratio Lower Upper
95 100
75 40.6 29.5 54.7
174 80.4 52.3 97.1
176 74.5 49.6 92.2





#68
naphthalene
Concen: 0.08 ug/L
RT: 12.26 min Scan# 2060
Delta R.T. -0.00 min
Lab File: 28JUL68.D
Acq: 29 Jul 2017 9:11 am

Tgt Ion:128 Resp: 791



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL68.D Vial: 68
Acq On : 29 Jul 2017 9:11 am Operator: MGC
Sample : 1720267-12 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00

MS Integration Params: rteint.p
Quant Time: Jul 29 9:43 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration
DataAcq Meth : 82605

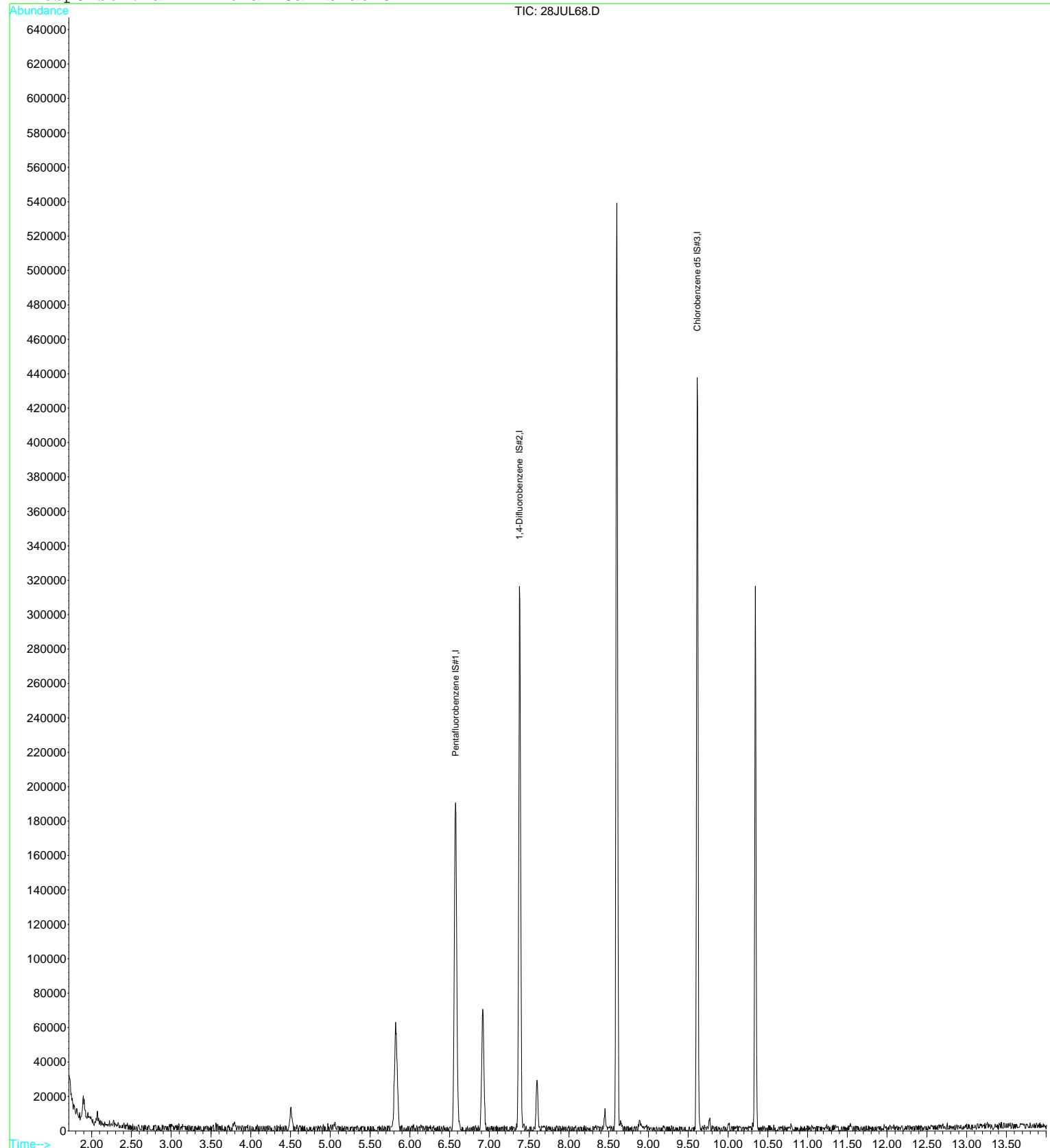
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----	-----	-----	-----	-----	-----	-----
1) Pentafluorobenzene IS#1	6.57	168	159019	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	231425	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	62697	10.00	ug/L	0.00

Target Compounds	Qvalue
-----	-----

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL68.D Vial: 68
Acq On : 29 Jul 2017 9:11 am Operator: MGC
Sample : 1720267-12 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:43 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL69.D Vial: 69
 Acq On : 29 Jul 2017 9:34 am Operator: MGC
 Sample : 1720267-13 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multipllr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 29 10:30 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	155506	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	233178	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	61496	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	48163	10.60	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	106.00%
31) Toluene d8 SMC#2	8.60	98	276776	9.61	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.10%
49) Bromofluorobenzene SMC#3	10.34	95	91429	9.96	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.60%

Target Compounds Qvalue

(#= qualifier out of range (m)= manual integration

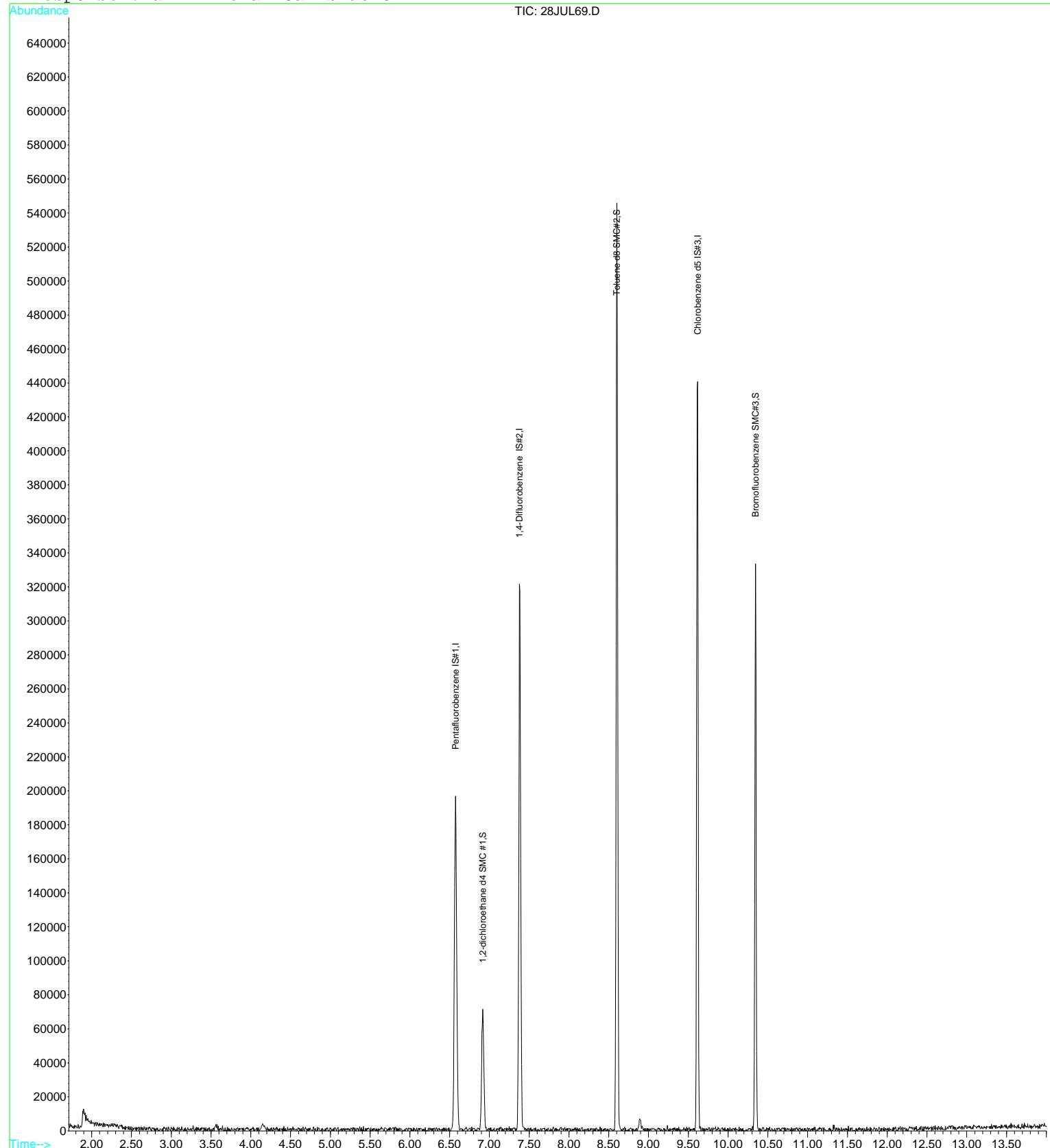
28JUL69.D 82605.M Sat Jul 29 10:30:13 2017

Page 1

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL69.D Vial: 69
Acq On : 29 Jul 2017 9:34 am Operator: MGC
Sample : 1720267-13 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 10:30 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL69.D Vial: 69
Acq On : 29 Jul 2017 9:34 am Operator: MGC
Sample : 1720267-13 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00

MS Integration Params: rteint.p
Quant Time: Jul 29 10:32 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)

Title : EPA Method 624/8260

Last Update : Fri Jul 21 04:19:15 2017

Response via : Initial Calibration

DataAcq Meth : 82605

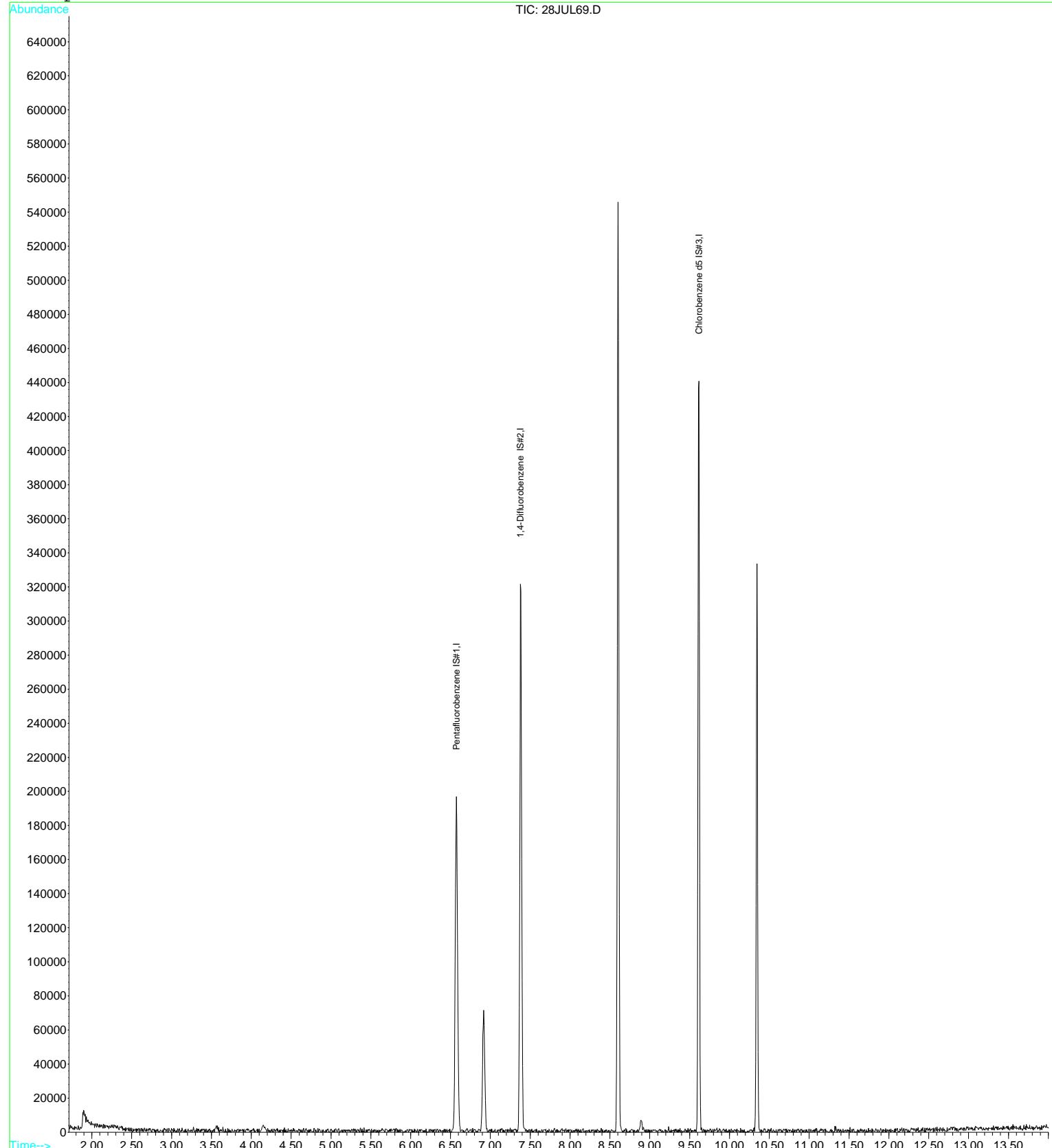
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----	-----	-----	-----	-----	-----	-----
1) Pentafluorobenzene IS#1	6.57	168	155506	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	233178	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	61496	10.00	ug/L	0.00

Target Compounds	Qvalue
-----	-----

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL69.D Vial: 69
Acq On : 29 Jul 2017 9:34 am Operator: MGC
Sample : 1720267-13 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 10:32 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL70.D Vial: 70
 Acq On : 29 Jul 2017 9:57 am Operator: MGC
 Sample : 1720267-14 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multipllr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 10:32 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	171202	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	247958	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	69440	10.00	ug/L	0.00

System Monitoring Compounds

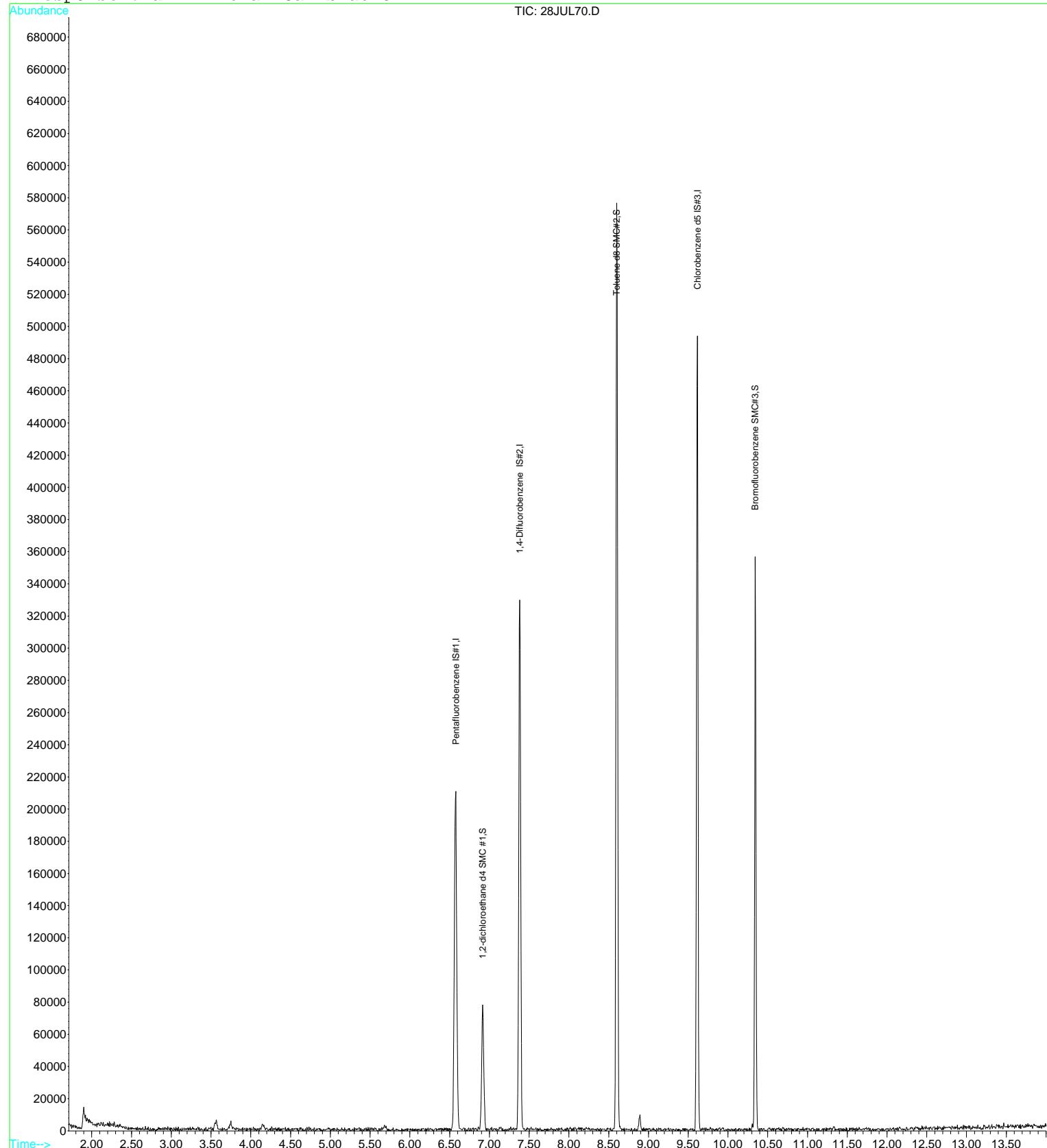
21) 1,2-dichloroethane d4 SMC	6.92	65	52513	10.50	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	105.00%
31) Toluene d8 SMC#2	8.60	98	298554	9.75	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.50%
49) Bromofluorobenzene SMC#3	10.34	95	98264	9.48	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	94.80%

Target Compounds	Qvalue
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Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL70.D Vial: 70
Acq On : 29 Jul 2017 9:57 am Operator: MGC
Sample : 1720267-14 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 10:32 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL70.D Vial: 70
Acq On : 29 Jul 2017 9:57 am Operator: MGC
Sample : 1720267-14 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 10:33 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration
DataAcq Meth : 82605

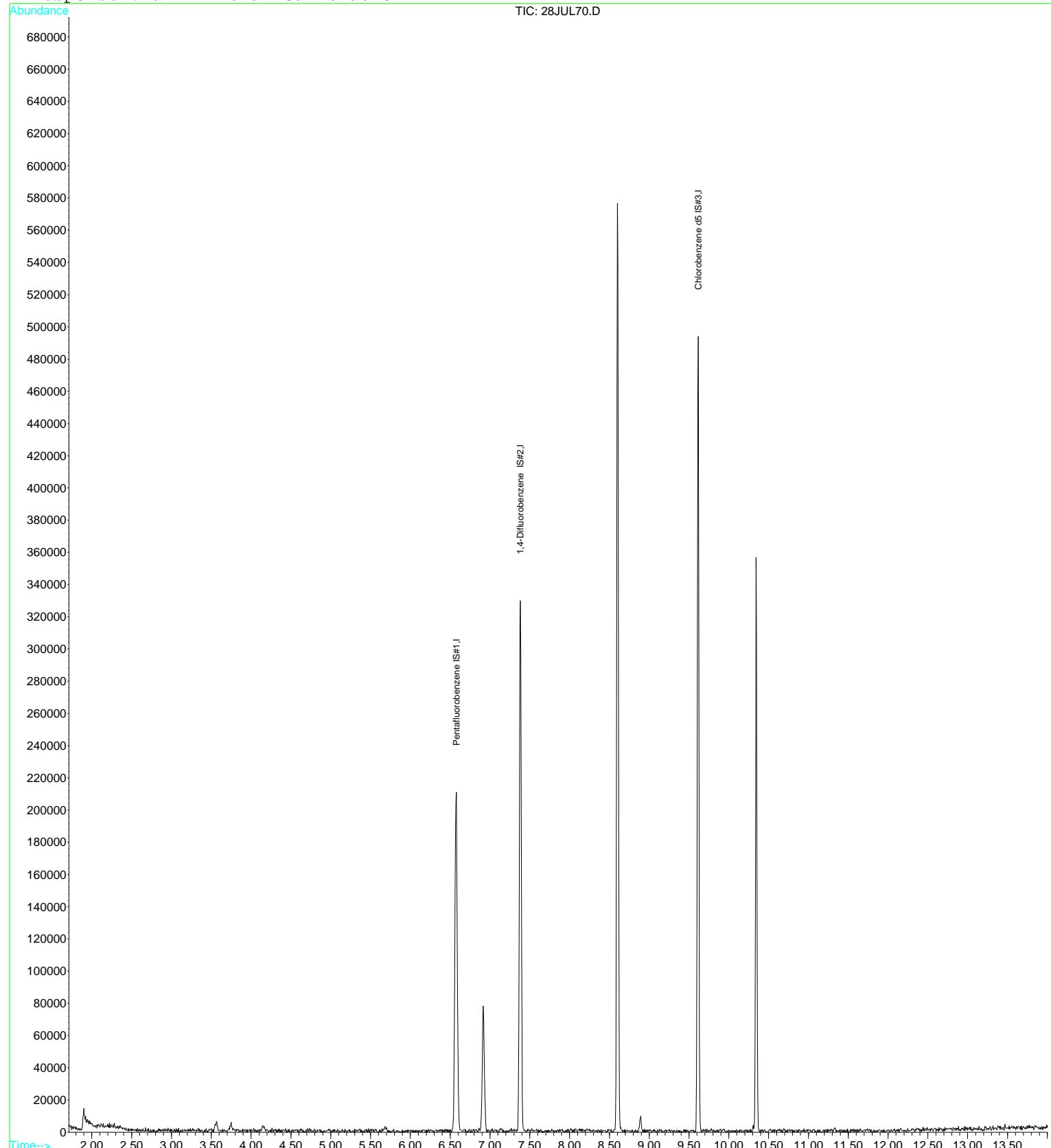
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----	-----	-----	-----	-----	-----	-----
1) Pentafluorobenzene IS#1	6.58	168	171202	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	247958	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	69440	10.00	ug/L	0.00

Target Compounds	Qvalue
-----	-----

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL70.D Vial: 70
Acq On : 29 Jul 2017 9:57 am Operator: MGC
Sample : 1720267-14 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 10:33 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL71.D Vial: 1
 Acq On : 29 Jul 2017 10:19 am Operator: MGC
 Sample : 1720267-15 Inst : MS-V5
 Misc : 1 ;25ML;pH=1 Multipllr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 29 10:33 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	174716	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	258428	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	69202	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	53598	10.50	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	105.00%
31) Toluene d8 SMC#2	8.60	98	317509	9.95	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.50%
49) Bromofluorobenzene SMC#3	10.35	95	99074	9.59	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	95.90%

Target Compounds Qvalue

(#= qualifier out of range (m)= manual integration

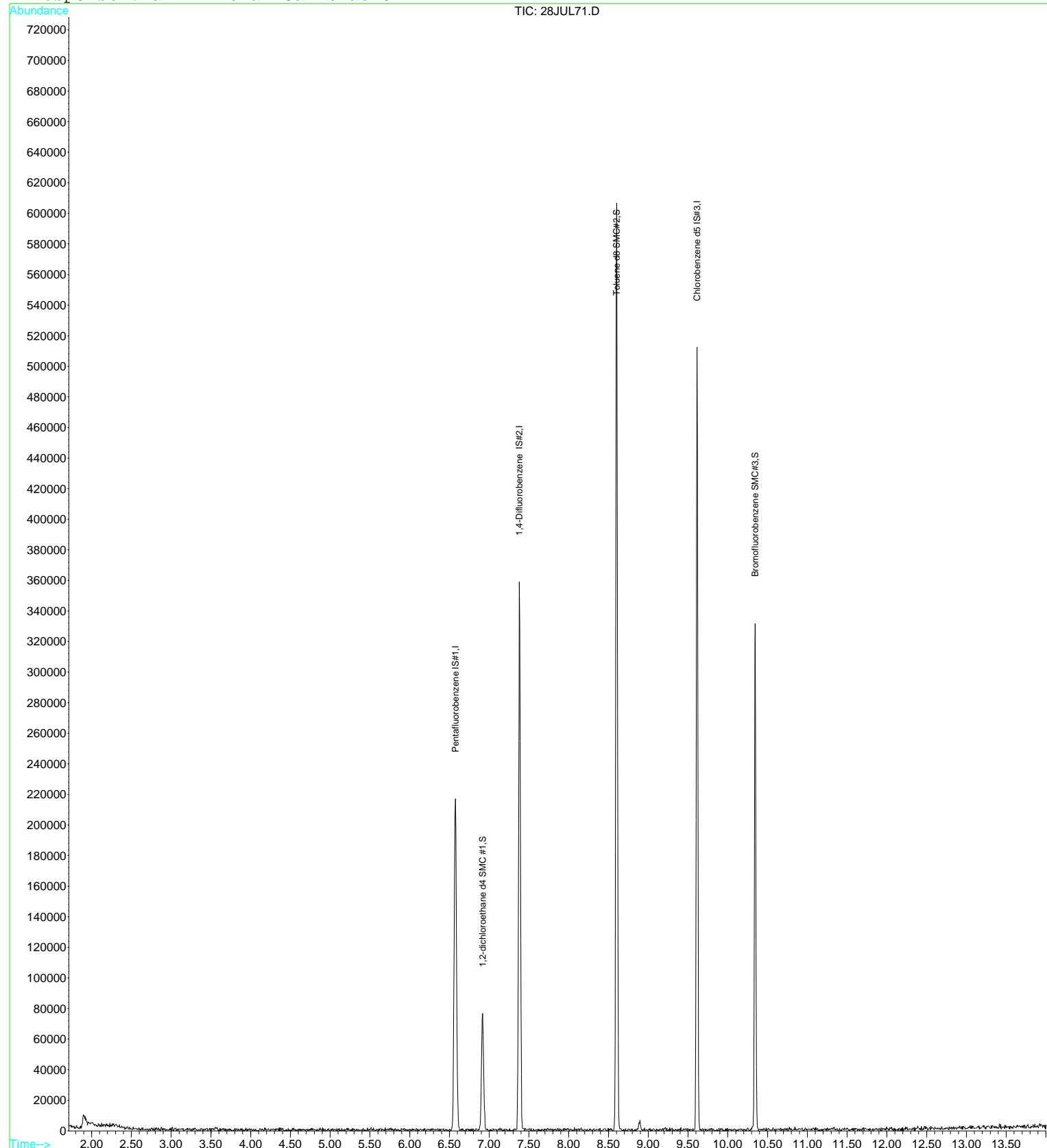
28JUL71.D 82605.M Sat Jul 29 10:34:58 2017

Page 1

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL71.D Vial: 1
Acq On : 29 Jul 2017 10:19 am Operator: MGC
Sample : 1720267-15 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 10:33 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL71.D Vial: 1
Acq On : 29 Jul 2017 10:19 am Operator: MGC
Sample : 1720267-15 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00

MS Integration Params: rteint.p
Quant Time: Jul 29 10:35 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)

Title : EPA Method 624/8260

Last Update : Fri Jul 21 04:19:15 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----	-----	-----	-----	-----	-----	-----
1) Pentafluorobenzene IS#1	6.57	168	174716	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	258428	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	69202	10.00	ug/L	0.00

Target Compounds	Qvalue
-----	-----

(#) = qualifier out of range (m) = manual integration

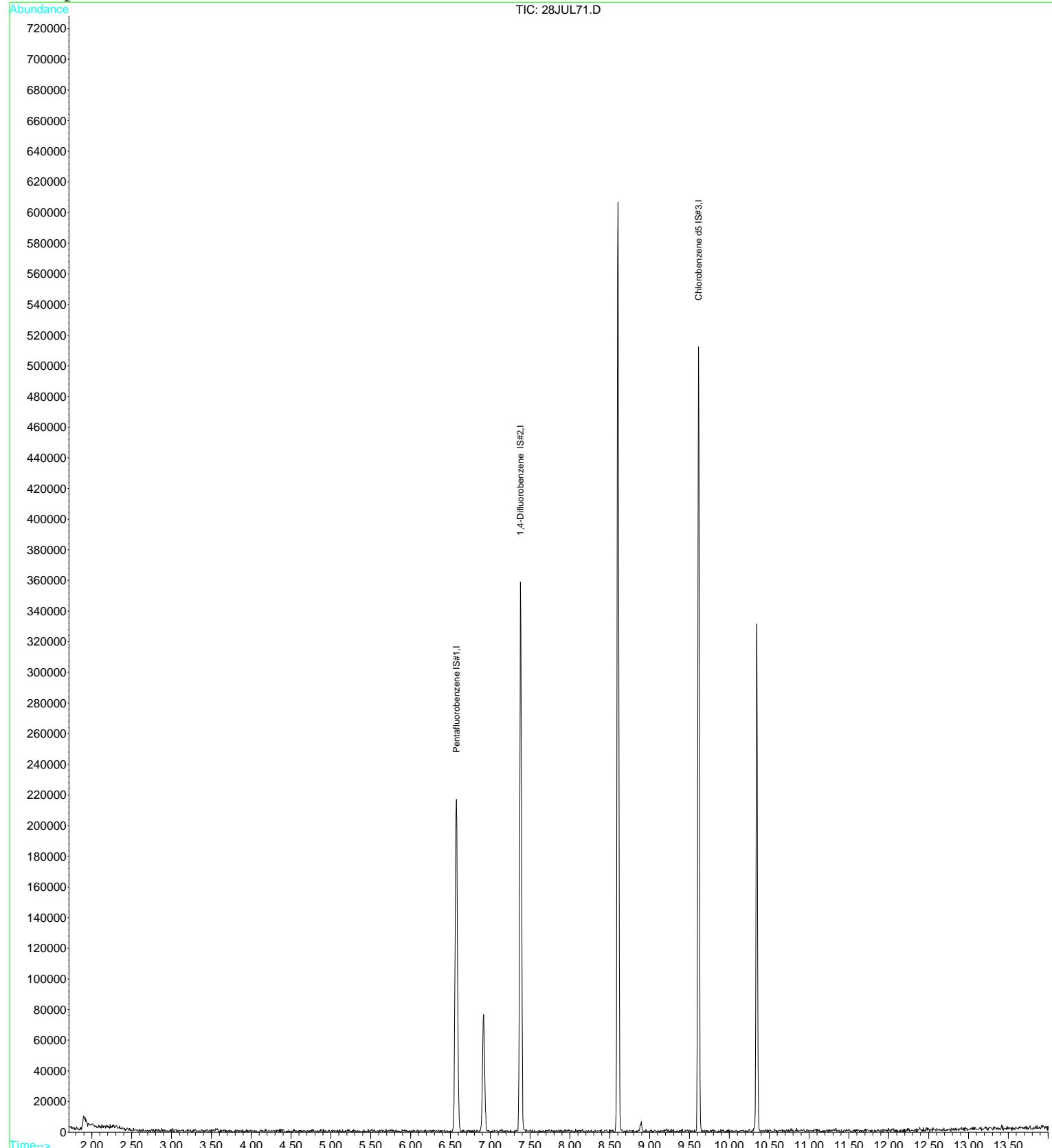
28JUL71.D 82605X.M Sat Jul 29 10:35:19 2017

Page 1

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL71.D Vial: 1
Acq On : 29 Jul 2017 10:19 am Operator: MGC
Sample : 1720267-15 Inst : MS-V5
Misc : 1 ;25ML;pH=1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 10:35 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration





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Environmental Testing Laboratory Since 1949



Raw Data - Calibration Standards

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL03.D Vial: 3
 Acq On : 20 Jul 2017 8:32 am Operator: MGC
 Sample : 1712752-CAL1 Inst : MS-V5
 Misc : 1 VO-109-70507;25ML Multipllr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 8:46 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	217011	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	336200	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	90897	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	65374	10.06	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	100.60%
31) Toluene d8 SMC#2	8.60	98	410267	9.86	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.60%
49) Bromofluorobenzene SMC#3	10.35	95	130298	9.68	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.80%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.76	85	4360	0.36	ug/L	90
3) Chloromethane	1.94	50	11998	0.58	ug/L	99
4) Vinyl chloride	2.07	62	8395	0.50	ug/L	# 69
5) Bromomethane	2.43	94	4401	0.93	ug/L	# 72
6) Chloroethane	2.57	64	6138	0.57	ug/L	93
7) Trichlorofluoromethane	2.86	101	6131	0.41	ug/L	# 76
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	4044	0.42	ug/L	# 84
9) 1,1-Dichloroethene	3.52	61	8614	0.47	ug/L	97
10) Methylene chloride	4.15	84	7409	0.78	ug/L	98
11) MTBE	4.49	73	6455	0.57	ug/L	85
12) T-1,2-dichloroethene	4.51	96	5712	0.50	ug/L	94
13) 1,1-Dichloroethane	5.05	63	12242	0.53	ug/L	100
14) 2,2-Dichloropropane	5.83	77	6502	3.22	ug/L	# 1
15) Cis-1,2-dichloroethene	5.83	96	5837	0.52	ug/L	89
16) Bromochloromethane	6.18	128	1853	0.51	ug/L	# 88
17) Chloroform	6.32	83	8555	0.51	ug/L	100
18) 1,1,1-Trichloroethane	6.53	97	6787	0.54	ug/L	# 53
19) 1,1-Dichloropropene	6.73	75	7443	0.48	ug/L	94
20) Carbon tetrachloride	6.71	119	4464	1.80	ug/L	# 74
22) 1,2-Dichloroethane	6.99	62	4167	0.45	ug/L	# 99
23) Benzene	6.93	78	23929	0.53	ug/L	87
25) Trichloroethene	7.60	130	5562	0.45	ug/L	88
26) 1,2-Dichloropropane	7.84	63	6298	0.50	ug/L	# 96
27) Dibromomethane	7.90	93	1490	0.46	ug/L	# 73
28) Bromodichloromethane	8.06	83	4855	0.54	ug/L	90
29) 2-ceve	8.28	63	6159	1.92	ug/L	# 95
30) Cis-1,3-dichloropropene	8.39	75	5596	1.85	ug/L	# 87
32) Toluene	8.65	92	15200	0.50	ug/L	80
33) Trans-1,3-dichloropropene	8.82	75	3122	2.84	ug/L	85
34) 1,1,2-Trichloroethane	8.96	97	2429	0.48	ug/L	92
35) Tetrachloroethene (PCE)	9.03	166	5719	0.51	ug/L	# 87
36) 1,3-Dichloropropane	9.08	76	4332	0.53	ug/L	# 81
37) Dibromochloromethane	9.24	129	2321	2.09	ug/L	# 85
38) 1,2-Dibromoethane	9.32	107	2337	1.18	ug/L	69
40) Chlorobenzene	9.63	112	16901	0.56	ug/L	95
41) 1,1,1,2-Tetrachloroethane	9.69	131	3340	0.98	ug/L	# 70
42) Ethylbenzene	9.69	106	8787	0.49	ug/L	85
43) P+m-Xylene	9.77	106	24229	1.12	ug/L	95
44) O-Xylene	10.01	106	9945	0.50	ug/L	93
45) Styrene	10.02	104	15101	0.50	ug/L	92
46) Bromoform	10.16	173	935	3.01	ug/L	# 100
47) Isopropylbenzene	10.23	105	27332	0.53	ug/L	96
48) 1,1,2,2-Tetrachloroethane	10.41	83	2268	0.45	ug/L	86
50) 1,2,3-Trichloropropane	10.45	110	229	Below Cal	#	100
51) n-propylbenzene	10.47	91	35646	0.54	ug/L	92

(#) = qualifier out of range (m) = manual integration

20JUL03.D 82605.M Thu Jul 20 10:17:26 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL03.D Vial: 3
 Acq On : 20 Jul 2017 8:32 am Operator: MGC
 Sample : 1712752-CAL1 Inst : MS-V5
 Misc : 1 VO-109-70507;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 8:46 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	5541	0.53	ug/L	79
53) 1,3,5-trimethylbenzene	10.58	105	22586	0.53	ug/L	95
54) 2-chlorotoluene	10.54	91	21303	0.51	ug/L	94
55) 4-chlorotoluene	10.61	91	19917	0.51	ug/L	87
56) tert-butylbenzene	10.77	119	21617	0.49	ug/L	98
57) 1,2,4-trimethylbenzene	10.80	105	22333	0.53	ug/L	97
58) sec-butylbenzene	10.89	105	30496	0.53	ug/L	98
59) 4-isopropyltoluene	10.97	119	25793	0.55	ug/L	98
60) 1,3-Dichlorobenzene	10.98	146	11500	0.50	ug/L	94
61) 1,4-Dichlorobenzene	11.03	146	10889	0.47	ug/L	95
62) n-butylbenzene	11.20	91	23084	0.53	ug/L	99
63) 1,2-Dichlorobenzene	11.24	146	10212	0.52	ug/L	96
64) Hexachloroethane	11.40	117	2279	3.97	ug/L #	6
66) 1,2,4-trichlorobenzene	12.11	180	5686	0.55	ug/L	94
67) hexachlorobutadiene	12.17	225	4421	0.57	ug/L #	70
68) naphthalene	12.26	128	6587	0.53	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	4987	0.63	ug/L	96

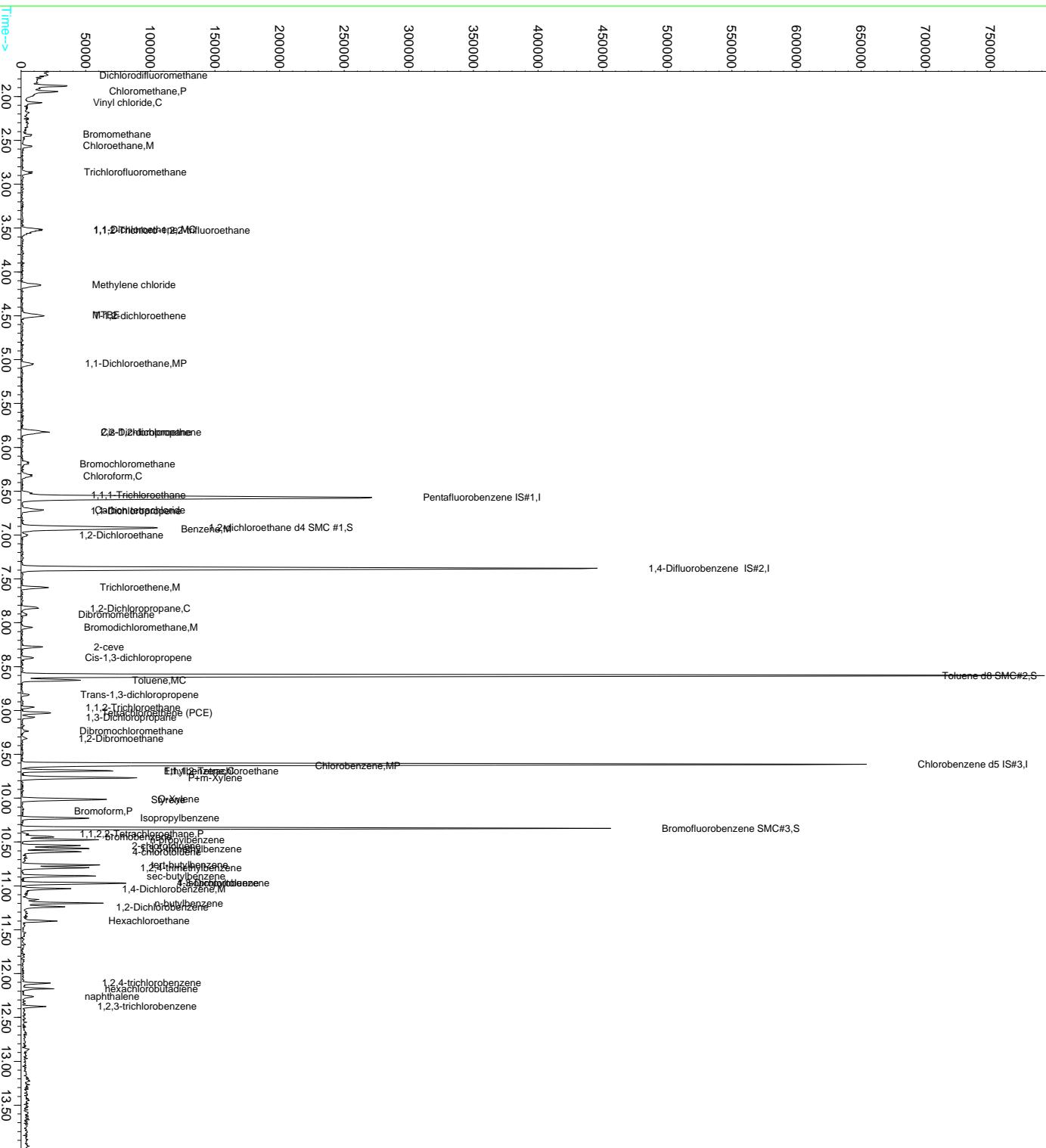
(#) = qualifier out of range (m) = manual integration
 20JUL03.D 82605.M Thu Jul 20 10:17:26 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL03.D Vial: 3
 Acq On : 20 Jul 2017 8:32 am Operator: MGC
 Sample : 1712752-CAL1 Inst: MS-V5
 Misc : 1 VO-109-70507;25ML Multipl: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 8:46 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration

TIC: 20JUL03.D



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL05.D Vial: 5
 Acq On : 20 Jul 2017 9:18 am Operator: MGC
 Sample : 1712752-CAL2 Inst : MS-V5
 Misc : 1 VO-109-70508;25ML Multipllr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 10:19 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	219386	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	341653	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	89283	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	66214	10.08	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	100.80%
31) Toluene d8 SMC#2	8.60	98	421815	9.98	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.80%
49) Bromofluorobenzene SMC#3	10.34	95	133853	10.12	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	101.20%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	1.76	85	10205	0.84	ug/L
3) Chloromethane	1.95	50	21928	1.05	ug/L
4) Vinyl chloride	2.07	62	17214	1.01	ug/L #
5) Bromomethane	2.44	94	8855	1.39	ug/L #
6) Chloroethane	2.57	64	12085	1.10	ug/L
7) Trichlorofluoromethane	2.87	101	13464	0.88	ug/L #
8) 1,1,2-Trichloro-1,2,2-trif	3.54	101	8620	0.88	ug/L #
9) 1,1-Dichloroethene	3.52	61	18131	0.97	ug/L
10) Methylene chloride	4.15	84	10296	1.07	ug/L
11) MTBE	4.49	73	13643	1.20	ug/L
12) T-1,2-dichloroethene	4.50	96	10984	0.96	ug/L
13) 1,1-Dichloroethane	5.05	63	23710	1.01	ug/L
14) 2,2-Dichloropropane	5.83	77	12259	3.73	ug/L #
15) Cis-1,2-dichloroethene	5.82	96	12328	1.10	ug/L #
16) Bromochloromethane	6.17	128	3878	1.06	ug/L #
17) Chloroform	6.33	83	17811	1.05	ug/L
18) 1,1,1-Trichloroethane	6.52	97	14284	1.11	ug/L #
19) 1,1-Dichloropropene	6.72	75	15992	1.02	ug/L
20) Carbon tetrachloride	6.71	119	8848	2.24	ug/L #
22) 1,2-Dichloroethane	7.00	62	9765	1.04	ug/L #
23) Benzene	6.93	78	48005	1.05	ug/L #
25) Trichloroethene	7.61	130	11662	0.94	ug/L
26) 1,2-Dichloropropane	7.83	63	13360	1.04	ug/L #
27) Dibromomethane	7.91	93	3278	0.99	ug/L #
28) Bromodichloromethane	8.05	83	8927	0.97	ug/L
29) 2-ceve	8.28	63	12934	3.96	ug/L
30) Cis-1,3-dichloropropene	8.40	75	11335	2.29	ug/L #
32) Toluene	8.65	92	29659	0.96	ug/L
33) Trans-1,3-dichloropropene	8.82	75	7084	3.30	ug/L
34) 1,1,2-Trichloroethane	8.97	97	5837	1.15	ug/L
35) Tetrachloroethene (PCE)	9.03	166	11556	1.01	ug/L #
36) 1,3-Dichloropropane	9.08	76	9108	1.10	ug/L
37) Dibromochloromethane	9.23	129	4037	2.38	ug/L #
38) 1,2-Dibromoethane	9.32	107	3858	1.51	ug/L
40) Chlorobenzene	9.64	112	31301	1.05	ug/L
41) 1,1,1,2-Tetrachloroethane	9.69	131	6727	1.47	ug/L #
42) Ethylbenzene	9.69	106	18778	1.06	ug/L
43) P+m-Xylene	9.77	106	44367	2.09	ug/L
44) O-Xylene	10.01	106	19724	1.01	ug/L
45) Styrene	10.02	104	31371	1.05	ug/L
46) Bromoform	10.16	173	1829	3.38	ug/L #
47) Isopropylbenzene	10.23	105	55335	1.09	ug/L
48) 1,1,2,2-Tetrachloroethane	10.41	83	4868	0.99	ug/L
50) 1,2,3-Trichloropropane	10.45	110	833	0.51	ug/L #
51) n-propylbenzene	10.47	91	67596	1.04	ug/L

(#= qualifier out of range (m) = manual integration

20JUL05.D 82605.M Thu Jul 20 10:19:25 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL05.D Vial: 5
 Acq On : 20 Jul 2017 9:18 am Operator: MGC
 Sample : 1712752-CAL2 Inst : MS-V5
 Misc : 1 VO-109-70508;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 10:19 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

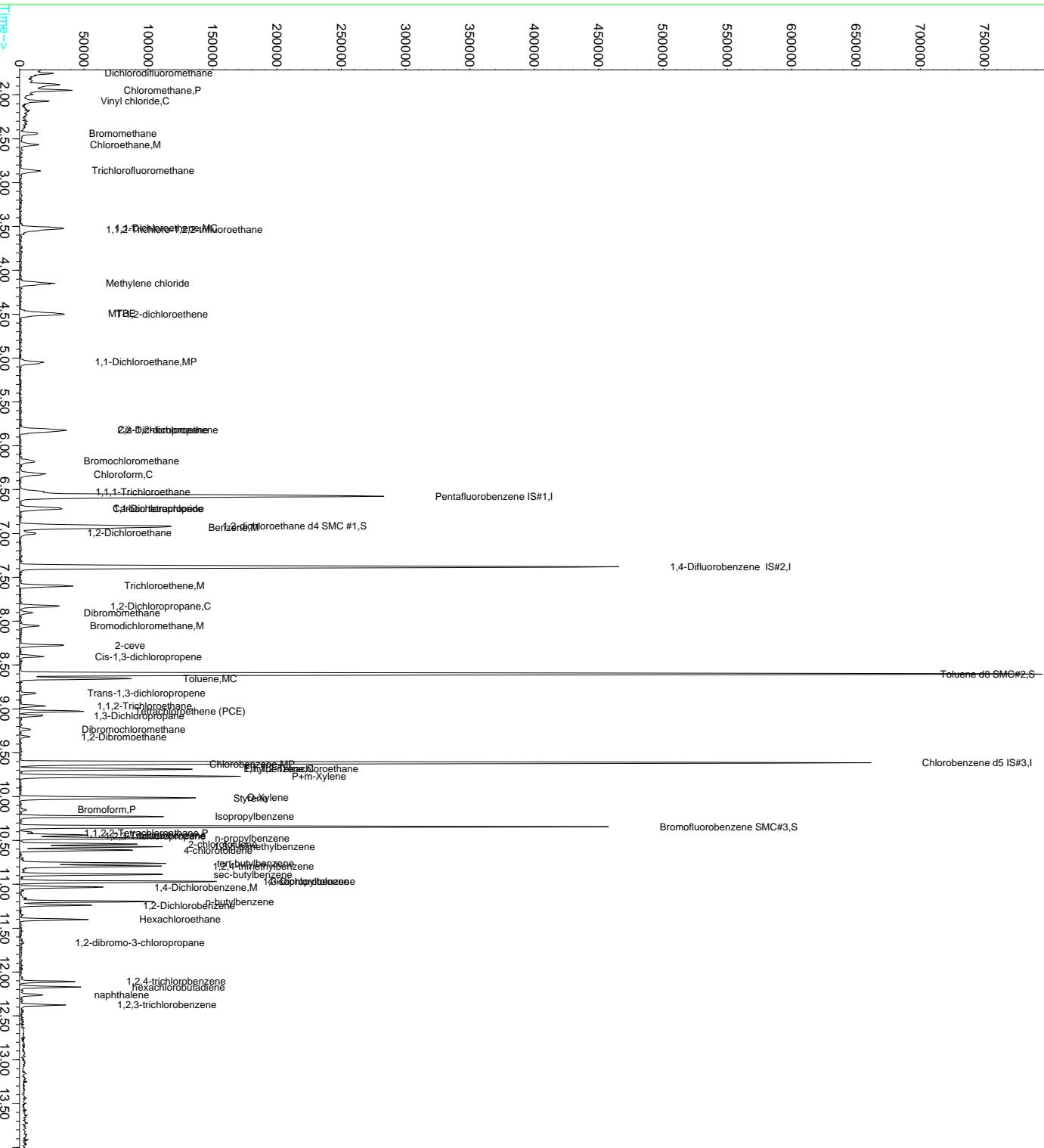
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	10864	1.06	ug/L	85
53) 1,3,5-trimethylbenzene	10.57	105	42696	1.01	ug/L	97
54) 2-chlorotoluene	10.54	91	46110	1.12	ug/L	98
55) 4-chlorotoluene	10.61	91	40015	1.04	ug/L	95
56) tert-butylbenzene	10.76	119	41937	0.98	ug/L	96
57) 1,2,4-trimethylbenzene	10.79	105	45106	1.10	ug/L	95
58) sec-butylbenzene	10.89	105	59925	1.06	ug/L	100
59) 4-isopropyltoluene	10.97	119	48357	1.05	ug/L	99
60) 1,3-Dichlorobenzene	10.98	146	23254	1.02	ug/L	93
61) 1,4-Dichlorobenzene	11.03	146	22114m	0.98	ug/L	
62) n-butylbenzene	11.20	91	45926	1.08	ug/L	97
63) 1,2-Dichlorobenzene	11.24	146	19114	1.00	ug/L	96
64) Hexachloroethane	11.40	117	4247	4.26	ug/L #	15
65) 1,2-dibromo-3-chloropropan	11.66	75	581	4.25	ug/L #	100
66) 1,2,4-trichlorobenzene	12.11	180	10744	1.07	ug/L	92
67) hexachlorobutadiene	12.18	225	7178	0.95	ug/L	87
68) naphthalene	12.26	128	11563	0.95	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	8903	1.14	ug/L	99

(#) = qualifier out of range (m) = manual integration
 20JUL05.D 82605.M Thu Jul 20 10:19:25 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL05.D Vial: 5
 Acq On : 20 Jul 2017 9:18 am Operator: MGC
 Sample : 1712752-CAL2 Inst: MS-V5
 Misc : 1 VO-109-70508;25ML Multipl: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 10:19 2017
 Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\8260 (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 Quant Results File: 82605.RES

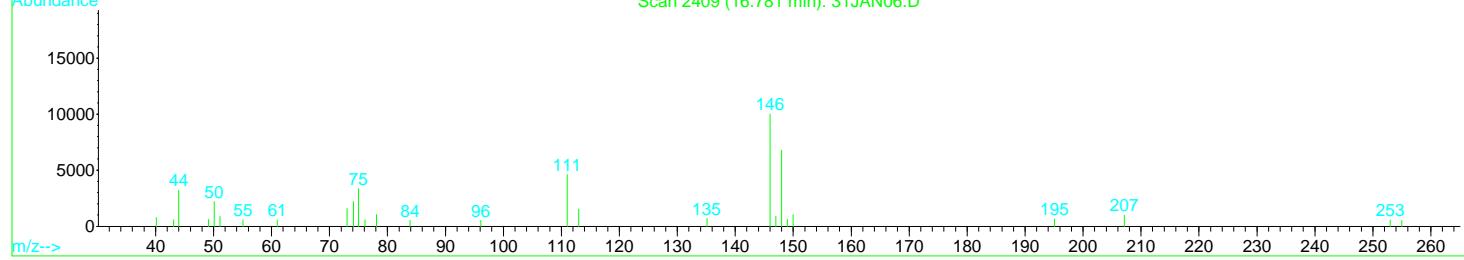
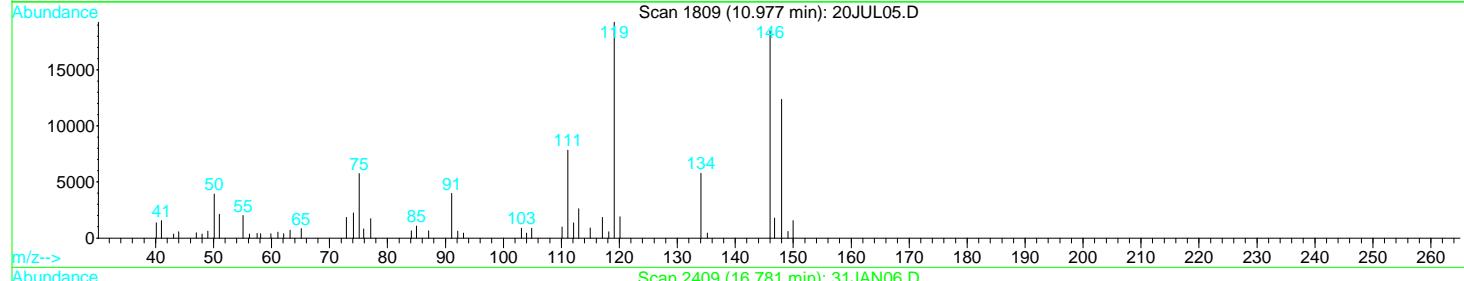
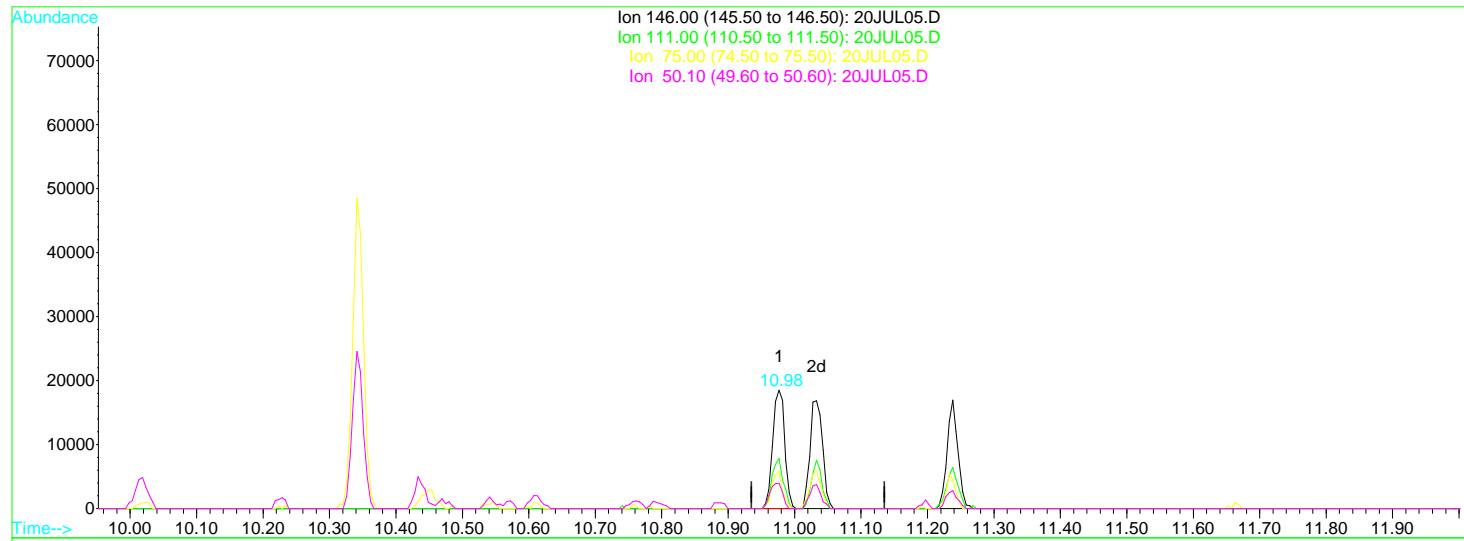
Abundance
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 600000
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 250000
 200000
 150000
 100000
 50000
 0



Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL05.D Vial: 5
 Acq On : 20 Jul 2017 9:18 am Operator: MGC
 Sample : 1712752-CAL2 Inst : MS-V5
 Misc : 1 VO-109-70508;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 9:33 2017 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Multiple Level Calibration



TIC: 20JUL05.D

(61) 1,4-Dichlorobenzene (M)

10.98min 1.03ug/L

response 23250

Ion	Exp%	Act%
146.00	100	100
111.00	41.60	39.83
75.00	24.40	27.84
50.10	20.80	22.45

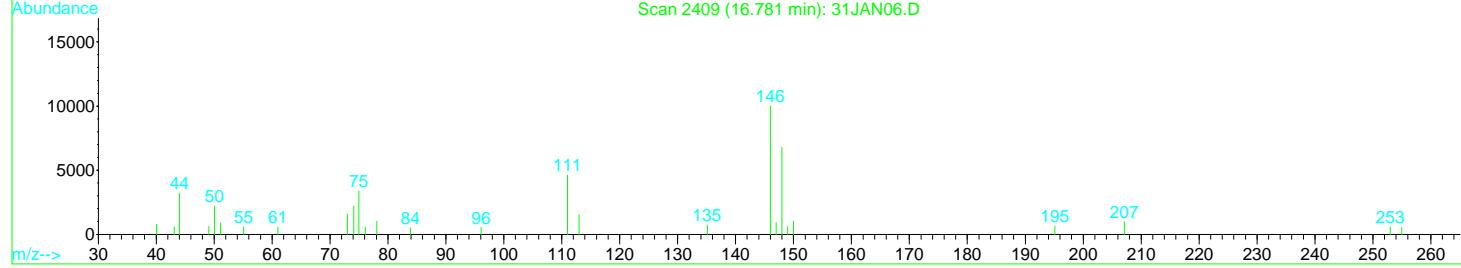
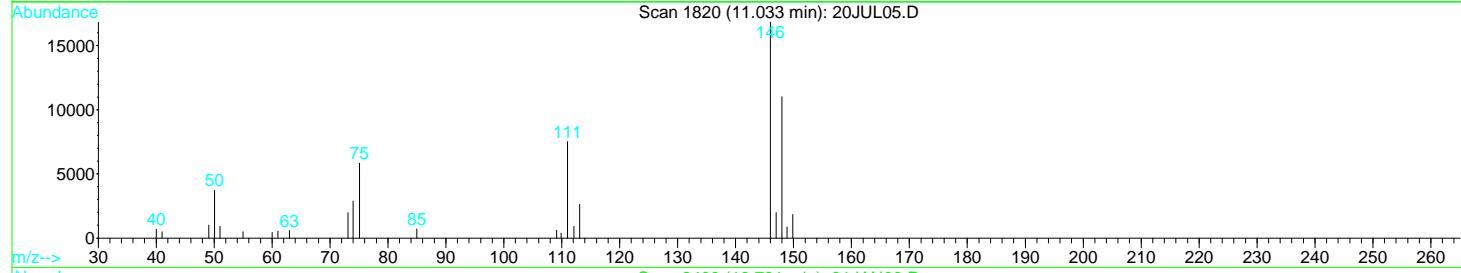
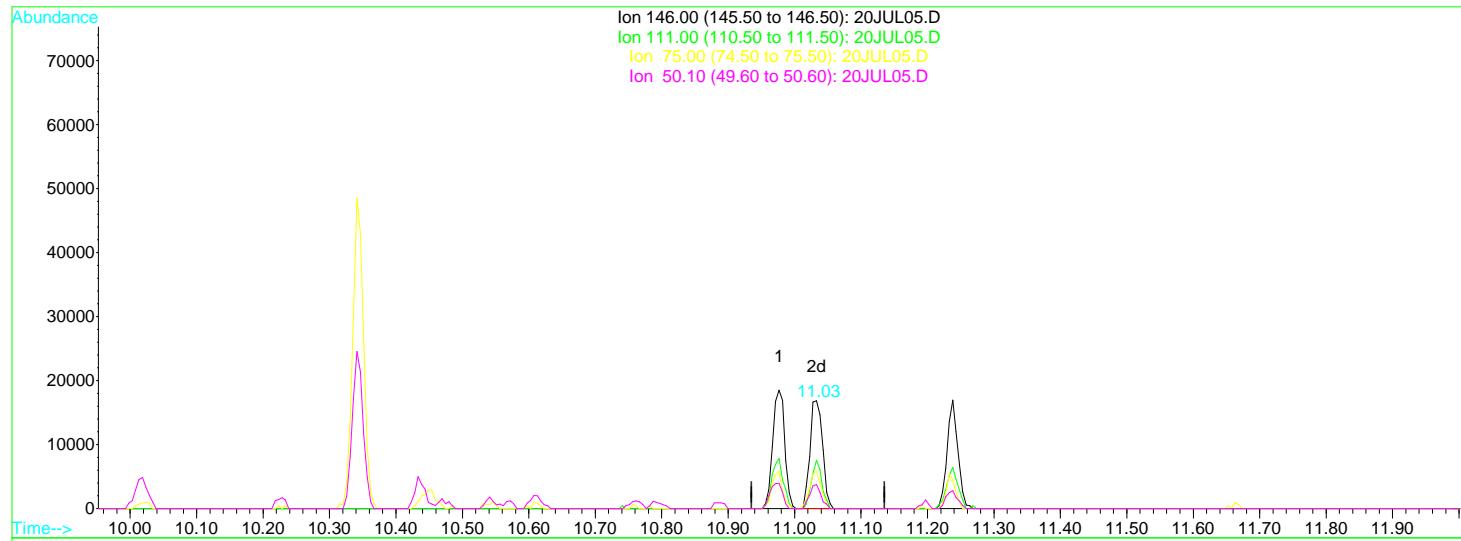
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL05.D
 Acq On : 20 Jul 2017 9:18 am
 Sample : 1712752-CAL2
 Misc : 1 VO-109-70508;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 20 10:19 2017

Vial: 5
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Multiple Level Calibration



TIC: 20JUL05.D

(61) 1,4-Dichlorobenzene (M)

11.03min 0.98ug/L m

response 22114

Ion	Exp%	Act%
146.00	100	100
111.00	41.60	41.88
75.00	24.40	29.27
50.10	20.80	23.60

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL06.D Vial: 6
 Acq On : 20 Jul 2017 9:42 am Operator: MGC
 Sample : 1712752-CAL3 Inst : MS-V5
 Misc : 1 VO-109-70509;25ML Multipllr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 9:56 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	160100	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	249503	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	66101	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	47251	9.86	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	98.60%
31) Toluene d8 SMC#2	8.60	98	305363	9.89	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.90%
49) Bromofluorobenzene SMC#3	10.34	95	99307	10.14	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	101.40%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.76	85	93410	10.56	ug/L	97
3) Chloromethane	1.95	50	157755	10.37	ug/L	100
4) Vinyl chloride	2.07	62	127041	10.21	ug/L	93
5) Bromomethane	2.44	94	67152	10.11	ug/L	#
6) Chloroethane	2.57	64	86319	10.80	ug/L	87
7) Trichlorofluoromethane	2.87	101	107360	9.66	ug/L	#
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	76401	10.68	ug/L	83
9) 1,1-Dichloroethene	3.52	61	141074	10.35	ug/L	97
10) Methylene chloride	4.15	84	73501	10.52	ug/L	96
11) MTBE	4.48	73	100477	12.07	ug/L	95
12) T-1,2-dichloroethene	4.50	96	85020	10.16	ug/L	95
13) 1,1-Dichloroethane	5.05	63	180828	10.54	ug/L	99
14) 2,2-Dichloropropane	5.83	77	102464	15.11	ug/L	#
15) Cis-1,2-dichloroethene	5.82	96	85789	10.46	ug/L	89
16) Bromochloromethane	6.17	128	27302	10.21	ug/L	#
17) Chloroform	6.33	83	124834	10.10	ug/L	93
18) 1,1,1-Trichloroethane	6.53	97	109656	11.72	ug/L	#
19) 1,1-Dichloropropene	6.72	75	116536	10.14	ug/L	98
20) Carbon tetrachloride	6.71	119	77032	12.04	ug/L	#
22) 1,2-Dichloroethane	7.00	62	70301	10.30	ug/L	#
23) Benzene	6.94	78	348744	10.48	ug/L	#
25) Trichloroethene	7.60	130	89913	9.88	ug/L	93
26) 1,2-Dichloropropane	7.83	63	97205	10.36	ug/L	#
27) Dibromomethane	7.91	93	25725	10.65	ug/L	#
28) Bromodichloromethane	8.05	83	73643	10.96	ug/L	99
29) 2-ceve	8.27	63	104717	43.90	ug/L	#
30) Cis-1,3-dichloropropene	8.40	75	92090	11.19	ug/L	#
32) Toluene	8.65	92	234614	10.35	ug/L	89
33) Trans-1,3-dichloropropene	8.82	75	61028	12.36	ug/L	97
34) 1,1,2-Trichloroethane	8.96	97	40551	10.91	ug/L	91
35) Tetrachloroethene (PCE)	9.03	166	86256	10.34	ug/L	90
36) 1,3-Dichloropropane	9.08	76	62221	10.30	ug/L	87
37) Dibromochloromethane	9.24	129	37739	10.50	ug/L	#
38) 1,2-Dibromoethane	9.32	107	34074	10.91	ug/L	#
40) Chlorobenzene	9.64	112	223358	10.12	ug/L	94
41) 1,1,1,2-Tetrachloroethane	9.69	131	55627	11.02	ug/L	#
42) Ethylbenzene	9.69	106	136417	10.36	ug/L	99
43) P+m-Xylene	9.77	106	342735	21.77	ug/L	97
44) O-Xylene	10.01	106	159918	11.03	ug/L	90
45) Styrene	10.02	104	239018	10.79	ug/L	94
46) Bromoform	10.15	173	15682	11.19	ug/L	#
47) Isopropylbenzene	10.23	105	416077	11.04	ug/L	94
48) 1,1,2,2-Tetrachloroethane	10.41	83	35710	9.83	ug/L	90
50) 1,2,3-Trichloropropane	10.45	110	7290	8.79	ug/L	#
51) n-propylbenzene	10.48	91	526001	10.88	ug/L	96

(#) = qualifier out of range (m) = manual integration

20JUL06.D 82605.M Thu Jul 20 10:19:54 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL06.D Vial: 6
 Acq On : 20 Jul 2017 9:42 am Operator: MGC
 Sample : 1712752-CAL3 Inst : MS-V5
 Misc : 1 VO-109-70509;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 9:56 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	77430	10.19	ug/L	92
53) 1,3,5-trimethylbenzene	10.57	105	346993	11.13	ug/L	98
54) 2-chlorotoluene	10.54	91	333425	10.98	ug/L	97
55) 4-chlorotoluene	10.61	91	306897	10.82	ug/L	91
56) tert-butylbenzene	10.76	119	322495	10.13	ug/L	95
57) 1,2,4-trimethylbenzene	10.79	105	335852	11.03	ug/L	99
58) sec-butylbenzene	10.89	105	468278	11.21	ug/L	98
59) 4-isopropyltoluene	10.97	119	378285	11.11	ug/L	98
60) 1,3-Dichlorobenzene	10.97	146	178686	10.59	ug/L	92
61) 1,4-Dichlorobenzene	11.03	146	170376	10.17	ug/L	95
62) n-butylbenzene	11.19	91	345036	10.94	ug/L	99
63) 1,2-Dichlorobenzene	11.23	146	148352	10.47	ug/L	97
64) Hexachloroethane	11.40	117	44652	12.34	ug/L #	1
65) 1,2-dibromo-3-chloropropan	11.66	75	4603	12.55	ug/L #	100
66) 1,2,4-trichlorobenzene	12.11	180	81142	10.87	ug/L	96
67) hexachlorobutadiene	12.17	225	56205	10.05	ug/L	85
68) naphthalene	12.26	128	107810	11.94	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	69823	12.11	ug/L	98

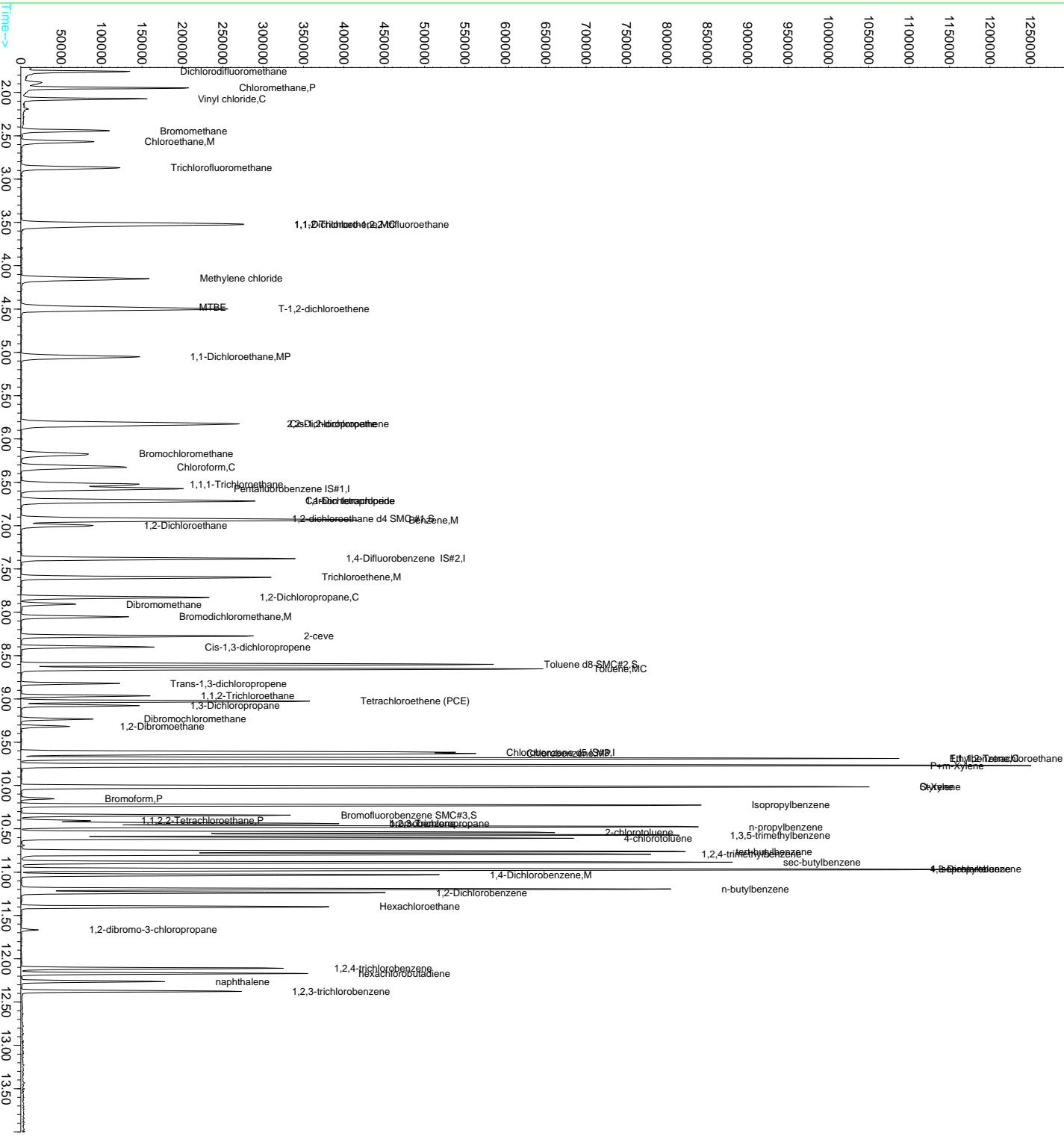
(#) = qualifier out of range (m) = manual integration
 20JUL06.D 82605.M Thu Jul 20 10:19:54 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL06.D Vial: 6
 Acq On : 20 Jul 2017 9:42 am Operator: MGC
 Sample : 1712752-CAL3 Inst: MS-V5
 Misc : 1 VO-109-70509;25ML Multipl: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 9:56 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration

Adj Totals 150000



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL07.D Vial: 7
 Acq On : 20 Jul 2017 10:05 am Operator: MGC
 Sample : 1712752-CAL4 Inst : MS-V5
 Misc : 1 VO-109-70510;25ML Multipllr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 10:19 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	187618	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	281102	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	72968	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	55567	9.89	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	98.90%
31) Toluene d8 SMC#2	8.60	98	350702	10.08	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	100.80%
49) Bromofluorobenzene SMC#3	10.34	95	110978	10.27	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	102.70%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.76	85	233707	22.55	ug/L	95
3) Chloromethane	1.95	50	397043	22.27	ug/L	96
4) Vinyl chloride	2.07	62	330883	22.69	ug/L	89
5) Bromomethane	2.44	94	180127	22.55	ug/L	# 82
6) Chloroethane	2.56	64	220423	23.54	ug/L	91
7) Trichlorofluoromethane	2.87	101	282193	21.68	ug/L	# 72
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	196960	23.49	ug/L	84
9) 1,1-Dichloroethene	3.51	61	361355	22.61	ug/L	97
10) Methylene chloride	4.15	84	189832	23.17	ug/L	96
11) MTBE	4.48	73	268374	27.51	ug/L	95
12) T-1,2-dichloroethene	4.50	96	220131	22.45	ug/L	95
13) 1,1-Dichloroethane	5.05	63	474319	23.59	ug/L	100
14) 2,2-Dichloropropane	5.83	77	271108	30.80	ug/L	# 1
15) Cis-1,2-dichloroethene	5.82	96	227870	23.70	ug/L	87
16) Bromochloromethane	6.18	128	72379	23.10	ug/L	# 84
17) Chloroform	6.32	83	330492	22.81	ug/L	94
18) 1,1,1-Trichloroethane	6.53	97	295919	26.99	ug/L	# 73
19) 1,1-Dichloropropene	6.71	75	298538	22.18	ug/L	97
20) Carbon tetrachloride	6.71	119	208396	26.04	ug/L	# 68
22) 1,2-Dichloroethane	7.00	62	180628	22.58	ug/L	# 84
23) Benzene	6.94	78	899294	23.06	ug/L	# 13
25) Trichloroethene	7.60	130	235207	22.95	ug/L	94
26) 1,2-Dichloropropane	7.83	63	261395	24.72	ug/L	# 93
27) Dibromomethane	7.91	93	63746	23.43	ug/L	# 75
28) Bromodichloromethane	8.05	83	200332	26.46	ug/L	98
29) 2-ceve	8.27	63	274355	102.09	ug/L	# 76
30) Cis-1,3-dichloropropene	8.40	75	254046	25.36	ug/L	# 83
32) Toluene	8.65	92	598158	23.41	ug/L	89
33) Trans-1,3-dichloropropene	8.82	75	172658	27.30	ug/L	96
34) 1,1,2-Trichloroethane	8.96	97	106093	25.33	ug/L	92
35) Tetrachloroethene (PCE)	9.03	166	219320	23.35	ug/L	91
36) 1,3-Dichloropropane	9.08	76	171822	25.25	ug/L	89
37) Dibromochloromethane	9.24	129	109837	24.44	ug/L	# 77
38) 1,2-Dibromoethane	9.32	107	87501	24.03	ug/L	74
40) Chlorobenzene	9.64	112	590580	24.23	ug/L	93
41) 1,1,1,2-Tetrachloroethane	9.69	131	157573	27.47	ug/L	# 72
42) Ethylbenzene	9.69	106	352215	24.23	ug/L	98
43) P+m-Xylene	9.77	106	860494	49.52	ug/L	95
44) O-Xylene	10.01	106	412366	25.76	ug/L	89
45) Styrene	10.02	104	624390	25.53	ug/L	94
46) Bromoform	10.15	173	46962	25.84	ug/L	# 100
47) Isopropylbenzene	10.23	105	1059489	25.47	ug/L	93
48) 1,1,2,2-Tetrachloroethane	10.41	83	103328	25.76	ug/L	92
50) 1,2,3-Trichloropropane	10.45	110	23022	25.64	ug/L	# 100
51) n-propylbenzene	10.48	91	1289258	24.16	ug/L	98

(#) = qualifier out of range (m) = manual integration

20JUL07.D 82605.M Thu Jul 20 10:20:27 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL07.D Vial: 7
 Acq On : 20 Jul 2017 10:05 am Operator: MGC
 Sample : 1712752-CAL4 Inst : MS-V5
 Misc : 1 VO-109-70510;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 10:19 2017 Quant Results File: 82605.RES

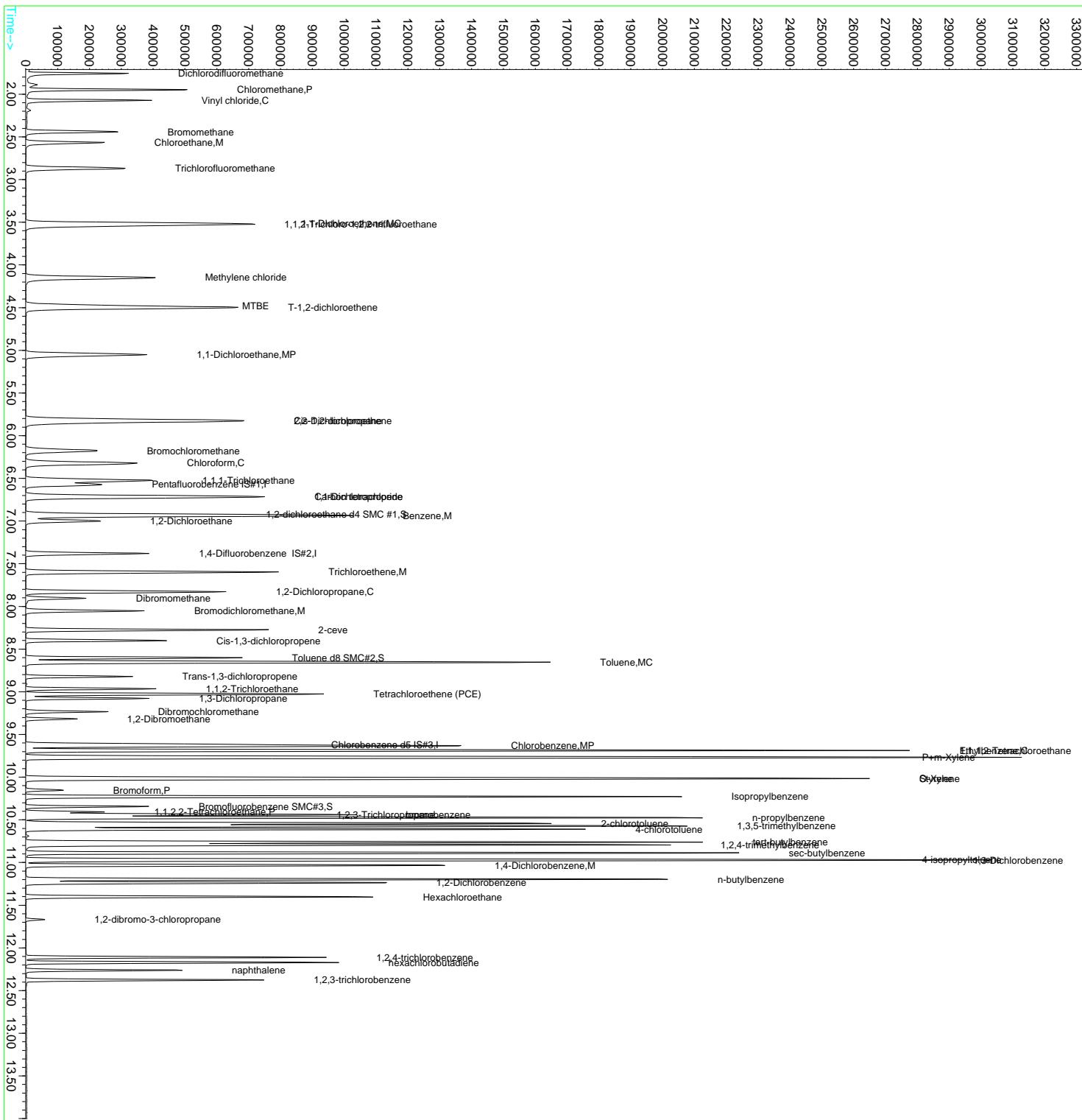
Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	208206	24.82	ug/L	88
53) 1,3,5-trimethylbenzene	10.57	105	881972	25.63	ug/L	98
54) 2-chlorotoluene	10.54	91	849225	25.34	ug/L	97
55) 4-chlorotoluene	10.61	91	776277	24.79	ug/L	90
56) tert-butylbenzene	10.76	119	911734	25.94	ug/L	89
57) 1,2,4-trimethylbenzene	10.79	105	846058	25.17	ug/L	97
58) sec-butylbenzene	10.89	105	1197671	25.96	ug/L	99
59) 4-isopropyltoluene	10.97	119	962264	25.59	ug/L	98
60) 1,3-Dichlorobenzene	10.98	146	457160	24.54	ug/L	94
61) 1,4-Dichlorobenzene	11.03	146	450868	24.37	ug/L	96
62) n-butylbenzene	11.20	91	877934	25.21	ug/L	98
63) 1,2-Dichlorobenzene	11.24	146	388191	24.82	ug/L	97
64) Hexachloroethane	11.40	117	142974	28.86	ug/L #	1
65) 1,2-dibromo-3-chloropropan	11.67	75	14154	28.88	ug/L #	100
66) 1,2,4-trichlorobenzene	12.11	180	228207	27.70	ug/L	96
67) hexachlorobutadiene	12.17	225	156478	25.35	ug/L	82
68) naphthalene	12.26	128	294245	29.51	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	186210	29.25	ug/L	95

(#) = qualifier out of range (m) = manual integration
 20JUL07.D 82605.M Thu Jul 20 10:20:27 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL07.D Vial: 7
 Acq On : 20 Jul 2017 10:05 am Operator: MGC
 Sample : 1712752-CAL4 Inst: MS-V5
 Misc : 1 VO-109-70510;25ML Multipl: 1.00
 MS Integration Params: rteint.P
 Quant Time: Jul 20 10:19 2017
 Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\8260 (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 Abundance
 TIC: 20JUL07.D
 Quant Results File: 82605.RES



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL08.D Vial: 8
 Acq On : 20 Jul 2017 10:28 am Operator: MGC
 Sample : 1712752-CAL5 Inst : MS-V5
 Misc : 1 VO-109-70511;25ML Multipllr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 10:42 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	185328	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	283937	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	75612	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	52177	9.40	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	94.00%
31) Toluene d8 SMC#2	8.60	98	352702	10.04	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	100.40%
49) Bromofluorobenzene SMC#3	10.34	95	113132	10.10	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	101.00%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.76	85	489050	47.78	ug/L	95
3) Chloromethane	1.95	50	811231	46.07	ug/L	96
4) Vinyl chloride	2.07	62	680952	47.28	ug/L	90
5) Bromomethane	2.44	94	383525	48.08	ug/L	# 81
6) Chloroethane	2.57	64	450541	48.70	ug/L	91
7) Trichlorofluoromethane	2.87	101	583179	45.35	ug/L	# 72
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	406766	49.12	ug/L	82
9) 1,1-Dichloroethene	3.51	61	746260	47.28	ug/L	98
10) Methylene chloride	4.15	84	382650	47.29	ug/L	97
11) MTBE	4.48	73	565037	58.65	ug/L	96
12) T-1,2-dichloroethene	4.50	96	456593	47.14	ug/L	94
13) 1,1-Dichloroethane	5.05	63	985020	49.59	ug/L	99
14) 2,2-Dichloropropane	5.83	77	578292	63.44	ug/L	# 1
15) Cis-1,2-dichloroethene	5.82	96	470220	49.51	ug/L	87
16) Bromochloromethane	6.17	128	150553	48.65	ug/L	# 84
17) Chloroform	6.32	83	686790	47.99	ug/L	94
18) 1,1,1-Trichloroethane	6.53	97	626987	57.90	ug/L	# 71
19) 1,1-Dichloropropene	6.72	75	627972	47.22	ug/L	98
20) Carbon tetrachloride	6.71	119	445807	54.82	ug/L	# 65
22) 1,2-Dichloroethane	7.00	62	371453	47.00	ug/L	# 85
23) Benzene	6.94	78	1825949	47.40	ug/L	# 12
25) Trichloroethene	7.60	130	495793	47.88	ug/L	95
26) 1,2-Dichloropropane	7.83	63	539026	50.47	ug/L	# 93
27) Dibromomethane	7.90	93	138763	50.50	ug/L	# 76
28) Bromodichloromethane	8.05	83	423668	55.40	ug/L	98
29) 2-ceve	8.27	63	573300	211.21	ug/L	# 75
30) Cis-1,3-dichloropropene	8.40	75	542482	52.04	ug/L	# 84
32) Toluene	8.65	92	1203883	46.65	ug/L	92
33) Trans-1,3-dichloropropene	8.82	75	369933	55.15	ug/L	99
34) 1,1,2-Trichloroethane	8.96	97	215153	50.87	ug/L	92
35) Tetrachloroethene (PCE)	9.03	166	458944	48.37	ug/L	91
36) 1,3-Dichloropropane	9.08	76	359418	52.30	ug/L	89
37) Dibromochloromethane	9.23	129	236453	50.18	ug/L	# 79
38) 1,2-Dibromoethane	9.32	107	185626	49.73	ug/L	73
40) Chlorobenzene	9.64	112	1199627	47.50	ug/L	94
41) 1,1,1,2-Tetrachloroethane	9.69	131	335607	55.90	ug/L	74
42) Ethylbenzene	9.69	106	728758	48.38	ug/L	88
43) P+m-Xylene	9.77	106	1720122	95.52	ug/L	88
44) O-Xylene	10.01	106	820982	49.50	ug/L	89
45) Styrene	10.02	104	1265285	49.93	ug/L	94
46) Bromoform	10.15	173	103405	51.93	ug/L	# 100
47) Isopropylbenzene	10.23	105	2058135	47.75	ug/L	91
48) 1,1,2,2-Tetrachloroethane	10.40	83	209018	50.28	ug/L	88
50) 1,2,3-Trichloropropane	10.45	110	46293	49.99	ug/L	# 100
51) n-propylbenzene	10.48	91	2486908	44.98	ug/L	97

(#) = qualifier out of range (m) = manual integration

20JUL08.D 82605.M Thu Jul 20 11:16:20 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL08.D Vial: 8
 Acq On : 20 Jul 2017 10:28 am Operator: MGC
 Sample : 1712752-CAL5 Inst : MS-V5
 Misc : 1 VO-109-70511;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 10:42 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	431566	49.65	ug/L	87
53) 1,3,5-trimethylbenzene	10.57	105	1748994	49.05	ug/L	96
54) 2-chlorotoluene	10.54	91	1732739	49.90	ug/L	94
55) 4-chlorotoluene	10.61	91	1522073	46.91	ug/L	86
56) tert-butylbenzene	10.76	119	1651439	45.35	ug/L	96
57) 1,2,4-trimethylbenzene	10.79	105	1707838	49.03	ug/L	94
58) sec-butylbenzene	10.89	105	2289268	47.89	ug/L	95
59) 4-isopropyltoluene	10.97	119	1837385	47.16	ug/L	96
60) 1,3-Dichlorobenzene	10.98	146	927038	48.02	ug/L	93
61) 1,4-Dichlorobenzene	11.03	146	927481	48.39	ug/L	95
62) n-butylbenzene	11.19	91	1757111	48.70	ug/L	96
63) 1,2-Dichlorobenzene	11.24	146	816300	50.36	ug/L	95
64) Hexachloroethane	11.40	117	338530	61.25	ug/L	# 1
65) 1,2-dibromo-3-chloropropan	11.66	75	28130	52.27	ug/L	# 100
66) 1,2,4-trichlorobenzene	12.11	180	488995	57.27	ug/L	94
67) hexachlorobutadiene	12.17	225	330304	51.64	ug/L	81
68) naphthalene	12.26	128	645395	62.47	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	404558	61.33	ug/L	95

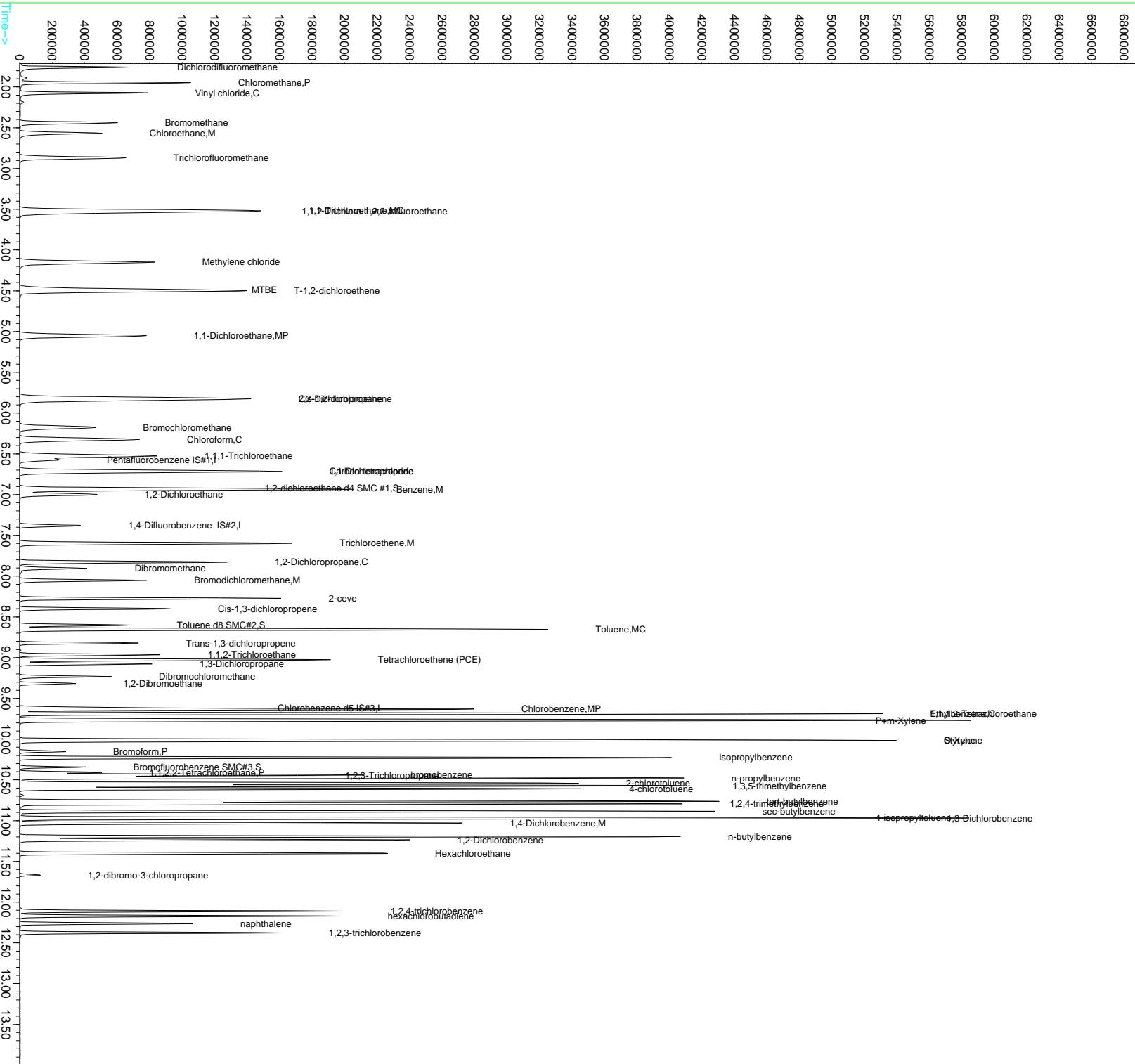
(#) = qualifier out of range (m) = manual integration
 20JUL08.D 82605.M Thu Jul 20 11:16:20 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL08.D Vial: 8
 Acq On : 20 Jul 2017 10:28 am Operator: MGC
 Sample : 1712752-CAL5 Inst: MS-V5
 Misc : 1 VO-109-70511;25ML Multipl: 1.00
 MS Integration Params: rteint.P
 Quant Time: Jul 20 10:42 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration

Abundance



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL09.D Vial: 9
 Acq On : 20 Jul 2017 10:51 am Operator: MGC
 Sample : 1712752-CAL6 Inst : MS-V5
 Misc : 1 VO-109-70512;25ML Multipllr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 11:17 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	190235	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	291095	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	79131	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	52606	9.24	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	92.40%
31) Toluene d8 SMC#2	8.60	98	361125	10.02	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	100.20%
49) Bromofluorobenzene SMC#3	10.35	95	119244	10.17	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	101.70%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	1.76	85	968491	92.18	ug/L
3) Chloromethane	1.95	50	1582330	87.55	ug/L
4) Vinyl chloride	2.07	62	1339863	90.62	ug/L
5) Bromomethane	2.43	94	784813	95.38	ug/L
6) Chloroethane	2.56	64	904760	95.28	ug/L
7) Trichlorofluoromethane	2.86	101	1169918	88.63	ug/L
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	827800	97.39	ug/L
9) 1,1-Dichloroethene	3.51	61	1454487	89.77	ug/L
10) Methylene chloride	4.15	84	782570	94.22	ug/L
11) MTBE	4.48	73	1135341	114.80	ug/L
12) T-1,2-dichloroethene	4.50	96	923699	92.92	ug/L
13) 1,1-Dichloroethane	5.05	63	1917451	94.05	ug/L
14) 2,2-Dichloropropane	5.83	77	1166561	122.13	ug/L
15) Cis-1,2-dichloroethene	5.82	96	959200	98.40	ug/L
16) Bromochloromethane	6.18	128	311515	98.07	ug/L
17) Chloroform	6.32	83	1363741	92.83	ug/L
18) 1,1,1-Trichloroethane	6.52	97	1261866	113.52	ug/L
19) 1,1-Dichloropropene	6.72	75	1237502	90.66	ug/L
20) Carbon tetrachloride	6.71	119	903203	106.90	ug/L
22) 1,2-Dichloroethane	7.00	62	735383	90.65	ug/L
23) Benzene	6.94	78	3475353	87.89	ug/L
25) Trichloroethene	7.60	130	1001087	94.31	ug/L
26) 1,2-Dichloropropane	7.83	63	1075561	98.23	ug/L
27) Dibromomethane	7.90	93	286571	101.73	ug/L
28) Bromodichloromethane	8.05	83	869037	110.85	ug/L
29) 2-ceve	8.28	63	1143478	410.90	ug/L
30) Cis-1,3-dichloropropene	8.40	75	1103839	101.90	ug/L
32) Toluene	8.65	92	2287718	86.47	ug/L
33) Trans-1,3-dichloropropene	8.82	75	767736	109.12	ug/L
34) 1,1,2-Trichloroethane	8.97	97	446863	103.05	ug/L
35) Tetrachloroethene (PCE)	9.03	166	916653	94.22	ug/L
36) 1,3-Dichloropropane	9.07	76	715185	101.51	ug/L
37) Dibromochloromethane	9.23	129	501363	101.99	ug/L
38) 1,2-Dibromoethane	9.32	107	385684	100.11	ug/L
40) Chlorobenzene	9.63	112	2281077	86.31	ug/L
41) 1,1,1,2-Tetrachloroethane	9.69	131	644759	102.17	ug/L
42) Ethylbenzene	9.69	106	1369792	86.89	ug/L
43) P+m-Xylene	9.77	106	3044741	161.56	ug/L
44) O-Xylene	10.01	106	1555446	89.61	ug/L
45) Styrene	10.02	104	2310367	87.11	ug/L
46) Bromoform	10.15	173	232645	108.61	ug/L
47) Isopropylbenzene	10.23	105	3519654	78.02	ug/L
48) 1,1,2,2-Tetrachloroethane	10.41	83	442065	101.62	ug/L
50) 1,2,3-Trichloropropane	10.45	110	99524	102.96	ug/L
51) n-propylbenzene	10.47	91	3994962	69.05	ug/L

(#) = qualifier out of range (m) = manual integration

20JUL09.D 82605.M Thu Jul 20 11:17:22 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL09.D Vial: 9
 Acq On : 20 Jul 2017 10:51 am Operator: MGC
 Sample : 1712752-CAL6 Inst : MS-V5
 Misc : 1 VO-109-70512;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 11:17 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	883596	97.12	ug/L	86
53) 1,3,5-trimethylbenzene	10.57	105	3042409	81.53	ug/L	88
54) 2-chlorotoluene	10.54	91	3108517	85.54	ug/L	88
55) 4-chlorotoluene	10.61	91	2812921m	82.84	ug/L	
56) tert-butylbenzene	10.76	119	3375108	88.55	ug/L	90
57) 1,2,4-trimethylbenzene	10.79	105	3034120	83.23	ug/L	88
58) sec-butylbenzene	10.89	105	3766201	75.29	ug/L #	84
59) 4-isopropyltoluene	10.97	119	3123617	76.61	ug/L	90
60) 1,3-Dichlorobenzene	10.98	146	1743457	86.30	ug/L	92
61) 1,4-Dichlorobenzene	11.03	146	1807605	90.11	ug/L	96
62) n-butylbenzene	11.20	91	3076408	81.47	ug/L #	89
63) 1,2-Dichlorobenzene	11.24	146	1598367	94.22	ug/L	96
64) Hexachloroethane	11.40	117	733609	122.92	ug/L #	1
65) 1,2-dibromo-3-chloropropan	11.67	75	63145	108.23	ug/L #	100
66) 1,2,4-trichlorobenzene	12.11	180	1002881	112.23	ug/L	95
67) hexachlorobutadiene	12.17	225	656383	98.06	ug/L	83
68) naphthalene	12.26	128	1360035	125.78	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	828865	120.07	ug/L	94

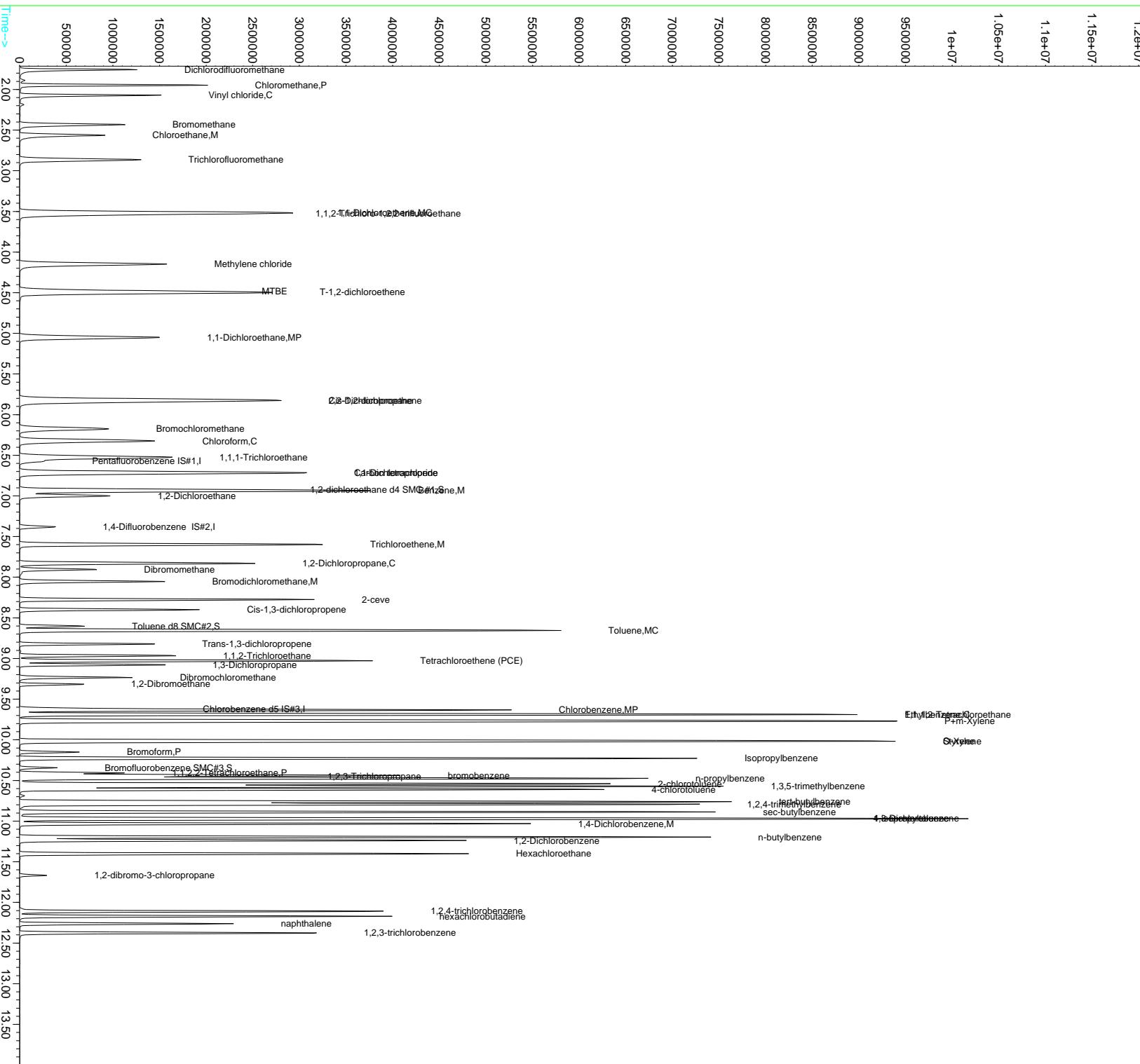
(#) = qualifier out of range (m) = manual integration
 20JUL09.D 82605.M Thu Jul 20 11:17:22 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL09.D Vial: 9
 Acq On : 20 Jul 2017 10:51 am Operator: MGC
 Sample : 1712752-CAL6 Inst: MS-V5
 Misc : 1 VO-109-70512;25ML Multipl: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 11:17 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\8260
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration

TIC: 20JUL09.D



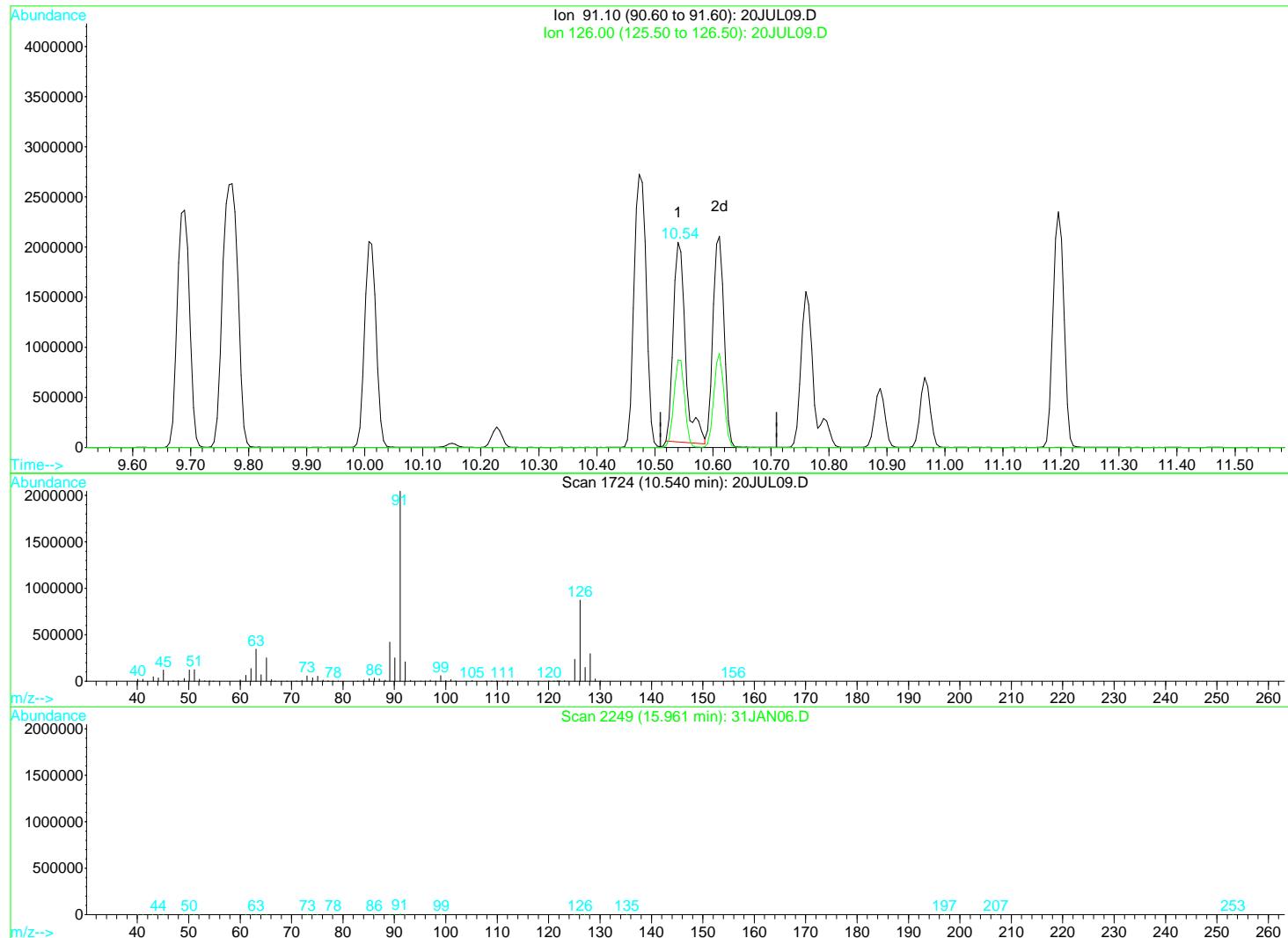
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL09.D
 Acq On : 20 Jul 2017 10:51 am
 Sample : 1712752-CAL6
 Misc : 1 VO-109-70512;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 20 11:05 2017

Vial: 9
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Multiple Level Calibration



TIC: 20JUL09.D

(55) 4-chlorotoluene

10.54min 85.95ug/L

response 2918491

Ion	Exp%	Act%
91.10	100	100
126.00	29.80	38.19
0.00	0.00	0.00
0.00	0.00	0.00

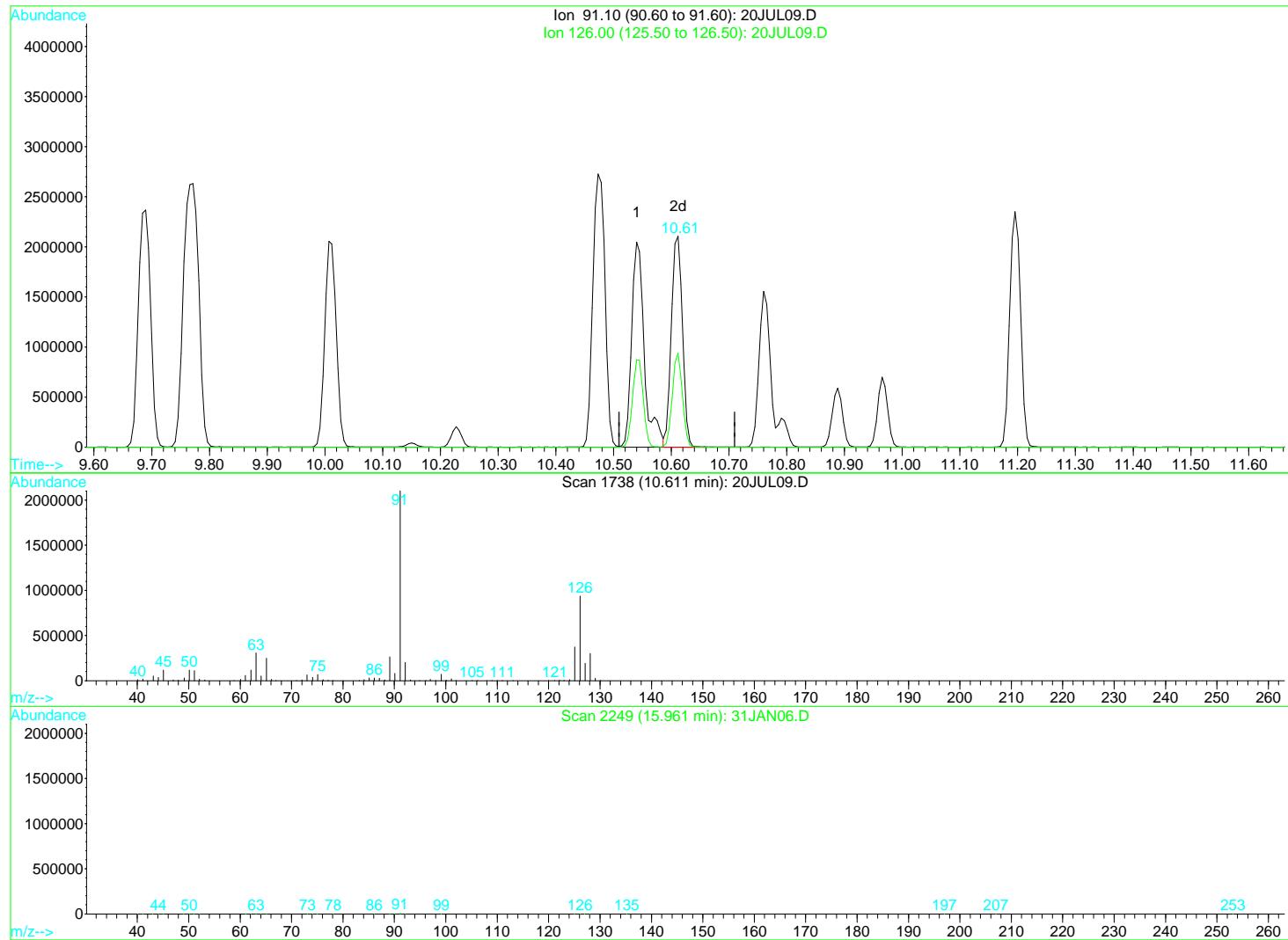
Quantitation Report (Qedit)

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL09.D
 Acq On : 20 Jul 2017 10:51 am
 Sample : 1712752-CAL6
 Misc : 1 VO-109-70512;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 20 11:17 2017

Vial: 9
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Multiple Level Calibration



TIC: 20JUL09.D

(55) 4-chlorotoluene

10.61min 82.84ug/L m

response 2812921

Ion	Exp%	Act%
91.10	100	100
126.00	29.80	39.63#
0.00	0.00	0.00
0.00	0.00	0.00

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL15.D
 Acq On : 20 Jul 2017 1:09 pm
 Sample : 1712752-CAL7
 Misc : 1 VO-109-70524;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 20 13:52 2017

Vial: 15
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Tue Jul 11 13:50:19 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	185398	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	284772	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	74464	10.00	ug/L	0.00

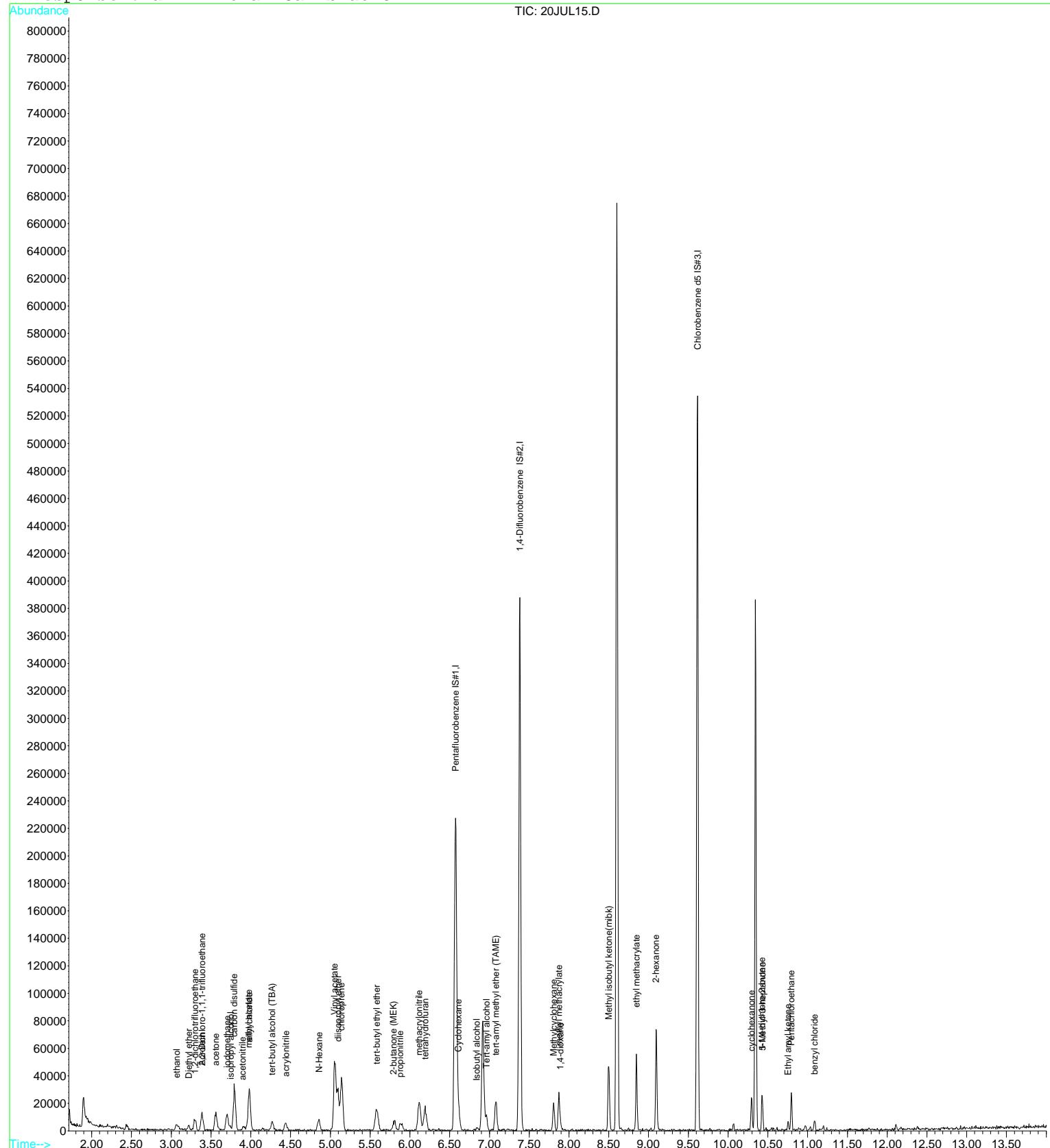
Target Compounds

					Qvalue
2) ethanol	3.07	45	6669	237.41	ug/L # 74
3) 2,2-Dichloro-1,1,1-trifluoroethane	3.39	83	8420	0.48	ug/L # 97
4) 1,2-dichlorotrifluoroethane	3.30	67	6359	0.54	ug/L 95
5) Diethyl ether	3.22	59	1957	0.40	ug/L 93
6) isopropyl alcohol	3.74	45	5048	38.17	ug/L # 61
7) Acrolein	3.39	56	3657	7.77	ug/L 90
8) acetone	3.56	43	17541	21.07	ug/L 96
9) tert-butyl alcohol (TBA)	4.27	59	8481	49.09	ug/L 100
10) acetonitrile	3.90	41	3998	10.33	ug/L # 17
11) methyl acetate	3.97	43	11350	4.98	ug/L 98
12) allyl chloride	3.98	41	31171	1.67	ug/L 99
13) iodomethane	3.70	142	15966	1.40	ug/L 99
14) acrylonitrile	4.44	53	5148	3.81	ug/L # 94
15) carbon disulfide	3.79	76	47833	1.70	ug/L 97
16) N-Hexane	4.86	57	4627	0.37	ug/L # 67
17) diisopropyl ether	5.10	87	6251	0.91	ug/L 97
18) Vinyl acetate	5.05	43	102573	11.40	ug/L 99
19) chloroprene	5.14	53	31785	1.57	ug/L 88
20) tert-butyl ethyl ether	5.59	59	20227	1.08	ug/L 93
21) 2-butanone (MEK)	5.79	43	12269	8.65	ug/L # 75
22) propionitrile	5.88	54	8801	18.19	ug/L # 93
23) Isobutyl alcohol	6.84	43	1703	58.05	ug/L # 72
24) methacrylonitrile	6.12	67	11704	9.39	ug/L 88
25) Tert-amyl alcohol	6.96	59	7446	338.59	ug/L # 66
26) tetrahydrofuran	6.19	42	16283	17.10	ug/L 95
27) Cyclohexane	6.61	56	13741	0.55	ug/L # 68
28) tert-amyl methyl ether (TA	7.09	73	11082	1.05	ug/L # 75
30) methyl methacrylate	7.87	69	9451	4.86	ug/L 99
31) Methylcyclohexane	7.80	55	7620	0.44	ug/L 89
32) 1,4-dioxane	7.89	88	2808	100.34	ug/L 84
33) Methyl isobutyl ketone(mib	8.50	43	29360	9.06	ug/L 96
34) ethyl methacrylate	8.85	69	21126	5.01	ug/L 94
35) 2-hexanone	9.09	43	40486	18.67	ug/L 98
37) 5-Methyl-3-heptanone	10.44	43	3036	0.90	ug/L # 81
38) cyclohexanone	10.29	55	9469	52.48	ug/L 93
39) t-1,4-dichloro-2-butene	10.43	75	2405	8.17	ug/L # 50
40) Ethyl amyl ketone	10.76	57	1285	0.43	ug/L # 89
41) Pentachloroethane	10.79	167	2461	2.44	ug/L 89
42) benzyl chloride	11.09	91	5221	4.23	ug/L # 57

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL15.D Vial: 15
 Acq On : 20 Jul 2017 1:09 pm Operator: MGC
 Sample : 1712752-CAL7 Inst : MS-V5
 Misc : 1 VO-109-70524;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 13:52 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-1232\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Tue Jul 11 13:50:19 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL17.D
 Acq On : 20 Jul 2017 1:55 pm
 Sample : 1712752-CAL8
 Misc : 1 VO-109-70525;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 20 14:21 2017

Vial: 17
 Operator: MGC
 Inst : MS-V5
 Multipllr: 1.00

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Tue Jul 11 13:50:19 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	181609	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	282158	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	74489	10.00	ug/L	0.00

Target Compounds

					Qvalue
2) ethanol	3.07	45	24231	880.61	ug/L # 42
3) 2,2-Dichloro-1,1,1-trifluoroethane	3.39	83	139435	8.06	ug/L # 76
4) 1,2-dichlorotrifluoroethane	3.30	67	95716	8.30	ug/L # 85
5) Diethyl ether	3.22	59	36853	7.68	ug/L # 85
6) isopropyl alcohol	3.74	45	24483	188.97	ug/L # 48
7) Acrolein	3.39	56	12111	26.26	ug/L # 57
8) acetone	3.56	43	53458	65.55	ug/L 93
9) tert-butyl alcohol (TBA)	4.27	59	35214	208.08	ug/L 100
10) acetonitrile	3.90	41	11392	30.06	ug/L 92
11) methyl acetate	3.97	43	183134	81.98	ug/L 94
12) allyl chloride	3.98	41	121027	6.64	ug/L 100
13) iodomethane	3.70	142	65253	5.82	ug/L 96
14) acrylonitrile	4.44	53	19247	14.55	ug/L 88
15) carbon disulfide	3.79	76	184809	6.70	ug/L 98
16) N-Hexane	4.85	57	93481	7.68	ug/L # 84
17) diisopropyl ether	5.09	87	21528	3.19	ug/L 96
18) Vinyl acetate	5.05	43	349748	39.68	ug/L 97
19) chloroprene	5.14	53	129340	6.52	ug/L 91
20) tert-butyl ethyl ether	5.59	59	72044	3.92	ug/L 96
21) 2-butanone (MEK)	5.80	43	44212	31.81	ug/L # 88
22) propionitrile	5.88	54	37744	79.64	ug/L # 91
23) Isobutyl alcohol	6.83	43	7785	131.68	ug/L # 76
24) methacrylonitrile	6.12	67	38110	31.21	ug/L 93
25) Tert-amyl alcohol	6.96	59	138382	1103.30	ug/L # 65
26) tetrahydrofuran	6.19	42	60102	64.44	ug/L 98
27) Cyclohexane	6.62	56	183532	7.51	ug/L # 74
28) tert-amyl methyl ether (TA	7.08	73	39088	3.77	ug/L 79
30) methyl methacrylate	7.88	69	32411	16.83	ug/L 88
31) Methylcyclohexane	7.81	55	138472	8.11	ug/L 92
32) 1,4-dioxane	7.89	88	10018	361.29	ug/L 96
33) Methyl isobutyl ketone(mib	8.50	43	101652	31.67	ug/L 96
34) ethyl methacrylate	8.85	69	75440	18.04	ug/L 95
35) 2-hexanone	9.09	43	138228	64.34	ug/L 99
37) 5-Methyl-3-heptanone	10.43	43	54948	16.26	ug/L 97
38) cyclohexanone	10.29	55	39500	218.83	ug/L 97
39) t-1,4-dichloro-2-butene	10.43	75	10413	28.03	ug/L # 41
40) Ethyl amyl ketone	10.75	57	22893	7.59	ug/L # 75
41) Pentachloroethane	10.79	167	9109	4.69	ug/L # 87
42) benzyl chloride	11.09	91	20812	11.38	ug/L # 55

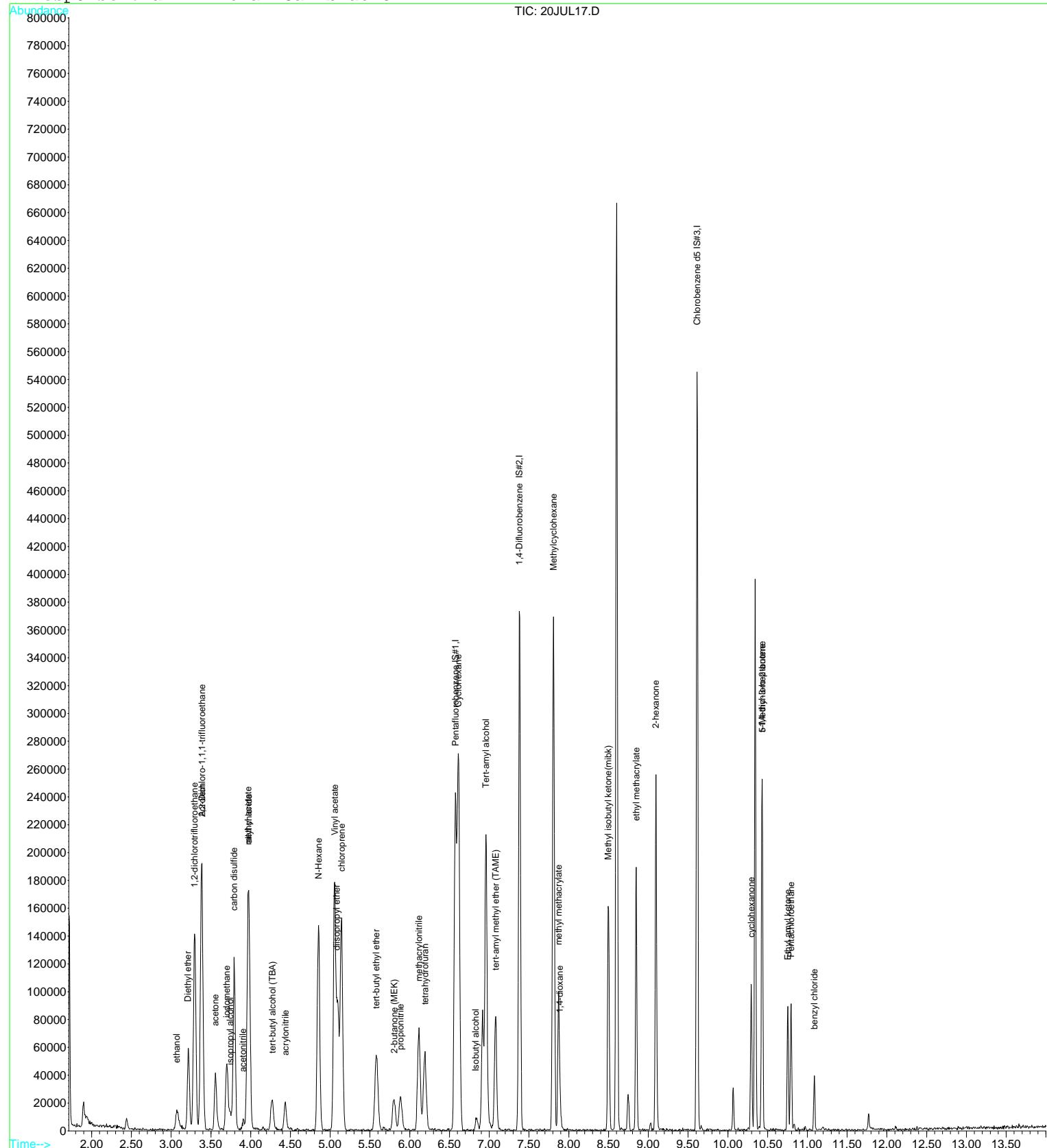
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL17.D
 Acq On : 20 Jul 2017 1:55 pm
 Sample : 1712752-CAL8
 Misc : 1 VO-109-70525;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 20 14:21 2017

Vial: 17
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-1232\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Tue Jul 11 13:50:19 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL18.D Vial: 18
 Acq On : 20 Jul 2017 2:18 pm Operator: MGC
 Sample : 1712752-CAL9 Inst : MS-V5
 Misc : 1 VO-109-70526;25ML Multipllr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 21 4:12 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Tue Jul 11 13:50:19 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	177625	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	272450	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	69283	10.00	ug/L	0.00

Target Compounds					Qvalue
2) ethanol	3.08	45	62213	2311.67	ug/L # 47
3) 2,2-Dichloro-1,1,1-trifluo	3.39	83	221656	13.09	ug/L # 75
4) 1,2-dichlorotrifluoroethan	3.30	67	150832	13.37	ug/L # 85
5) Diethyl ether	3.22	59	58599	12.49	ug/L 87
6) isopropyl alcohol	3.74	45	59618	470.49	ug/L # 44
7) Acrolein	3.39	56	30220	67.01	ug/L # 69
8) acetone	3.55	43	116631	146.21	ug/L 96
9) tert-butyl alcohol (TBA)	4.27	59	80745	487.83	ug/L 100
10) acetonitrile	3.91	41	27286	73.62	ug/L # 59
11) methyl acetate	3.96	43	288754	132.16	ug/L 94
12) allyl chloride	3.98	41	270178	15.15	ug/L 97
13) iodomethane	3.70	142	154713	14.12	ug/L 97
14) acrylonitrile	4.43	53	46773	36.15	ug/L 94
15) carbon disulfide	3.79	76	408149	15.12	ug/L 97
16) N-Hexane	4.86	57	150267	12.62	ug/L # 83
17) diisopropyl ether	5.10	87	52531	7.96	ug/L 91
18) Vinyl acetate	5.06	43	828062	96.05	ug/L 97
19) chloroprene	5.15	53	286537	14.77	ug/L 93
20) tert-butyl ethyl ether	5.58	59	170677	9.49	ug/L 96
21) 2-butanone (MEK)	5.80	43	102204	75.18	ug/L # 90
22) propionitrile	5.88	54	87903	189.63	ug/L # 90
23) Isobutyl alcohol	6.84	43	19916	283.09	ug/L # 71
24) methacrylonitrile	6.12	67	91400	76.53	ug/L 90
25) Tert-amyl alcohol	6.96	59	219925	1607.75	ug/L # 64
26) tetrahydrofuran	6.18	42	135022	148.01	ug/L 94
27) Cyclohexane	6.61	56	295091	12.35	ug/L # 72
28) tert-amyl methyl ether (TA	7.08	73	92322	9.10	ug/L # 76
30) methyl methacrylate	7.87	69	77276	41.56	ug/L 93
31) Methylcyclohexane	7.81	55	219815	13.33	ug/L 92
32) 1,4-dioxane	7.89	88	22981	858.33	ug/L 81
33) Methyl isobutyl ketone(mib	8.50	43	236406	76.27	ug/L 96
34) ethyl methacrylate	8.85	69	183288	45.39	ug/L 96
35) 2-hexanone	9.09	43	323658	156.02	ug/L 99
37) 5-Methyl-3-heptanone	10.43	43	87636	27.87	ug/L 96
38) cyclohexanone	10.30	55	94541	563.10	ug/L 95
39) t-1,4-dichloro-2-butene	10.43	75	25830	63.86	ug/L # 31
40) Ethyl amyl ketone	10.75	57	34434	12.27	ug/L # 78
41) Pentachloroethane	10.80	167	21823	9.53	ug/L 91
42) benzyl chloride	11.09	91	58763	26.60	ug/L # 58

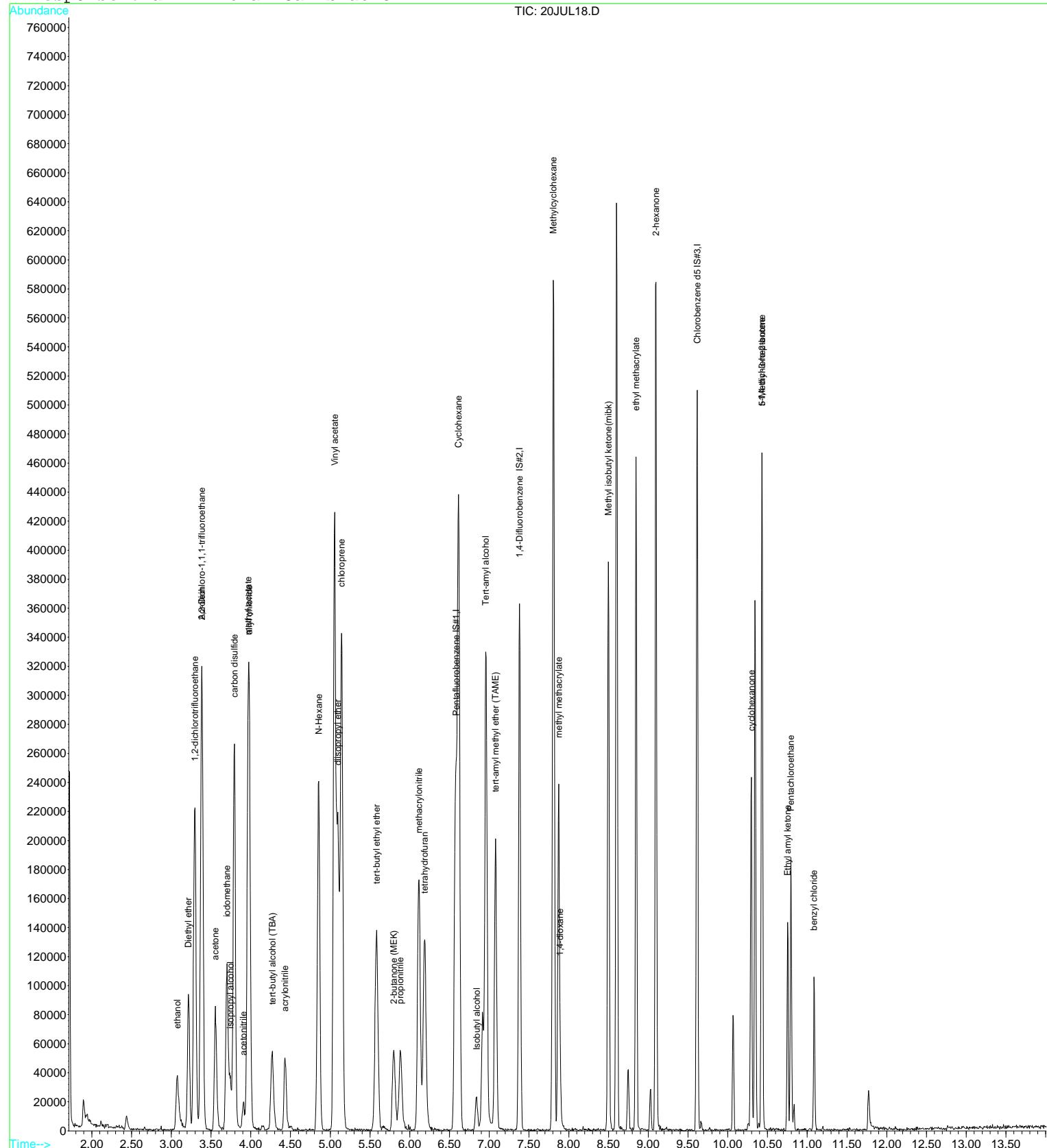
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL18.D
 Acq On : 20 Jul 2017 2:18 pm
 Sample : 1712752-CAL9
 Misc : 1 VO-109-70526;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 21 4:12 2017

Vial: 18
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-1232\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Tue Jul 11 13:50:19 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL19.D
 Acq On : 20 Jul 2017 2:41 pm
 Sample : 1712752-CALA
 Misc : 1 VO-109-70527;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 21 4:12 2017

Vial: 19
 Operator: MGC
 Inst : MS-V5
 Multipllr: 1.00

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Tue Jul 11 13:50:19 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	178179	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	269523	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	71971	10.00	ug/L	0.00

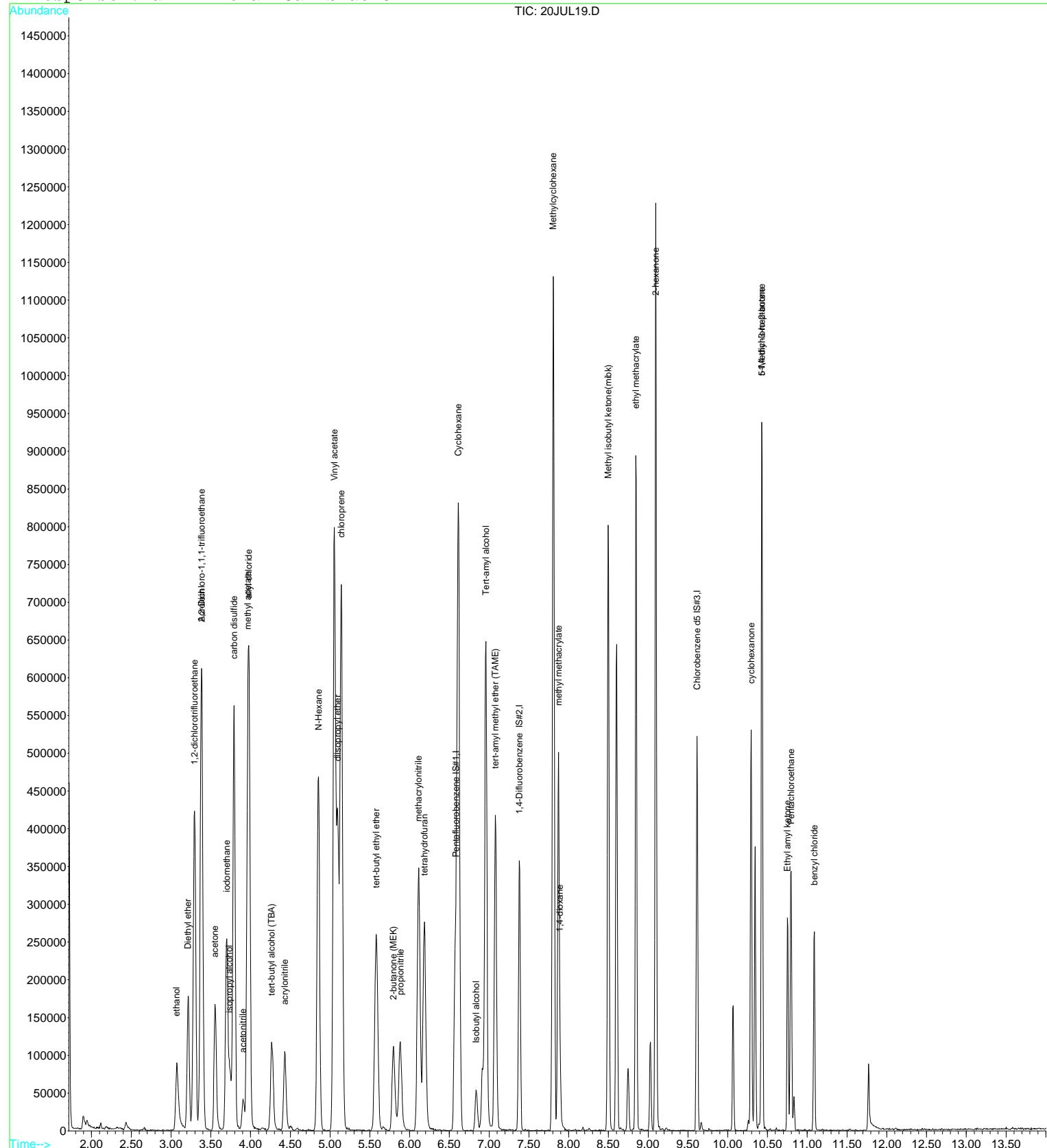
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) ethanol	3.07	45	140530	5205.50	ug/L	# 43
3) 2,2-Dichloro-1,1,1-trifluoroethane	3.38	83	425124	25.03	ug/L	# 73
4) 1,2-dichlorotrifluoroethane	3.30	67	284371	25.13	ug/L	# 83
5) Diethyl ether	3.22	59	114106	24.25	ug/L	85
6) isopropyl alcohol	3.74	45	131474	1034.33	ug/L	# 41
7) Acrolein	3.39	56	62901	139.04	ug/L	# 73
8) acetone	3.55	43	229854	287.26	ug/L	94
9) tert-butyl alcohol (TBA)	4.26	59	175269	1055.61	ug/L	100
10) acetonitrile	3.91	41	61133	164.42	ug/L	# 33
11) methyl acetate	3.96	43	550034	250.97	ug/L	95
12) allyl chloride	3.98	41	574268	32.11	ug/L	95
13) iodomethane	3.70	142	355621	32.35	ug/L	98
14) acrylonitrile	4.43	53	102774	79.19	ug/L	96
15) carbon disulfide	3.79	76	874992	32.31	ug/L	97
16) N-Hexane	4.85	57	297530	24.90	ug/L	# 84
17) diisopropyl ether	5.09	87	103764	15.68	ug/L	93
18) Vinyl acetate	5.05	43	1587903	183.61	ug/L	96
19) chloroprene	5.14	53	611898	31.45	ug/L	93
20) tert-butyl ethyl ether	5.58	59	340727	18.89	ug/L	96
21) 2-butanone (MEK)	5.80	43	200206	146.82	ug/L	# 86
22) propionitrile	5.88	54	183350	394.30	ug/L	# 88
23) Isobutyl alcohol	6.84	43	44239	580.76	ug/L	# 69
24) methacrylonitrile	6.12	67	186727	155.86	ug/L	88
25) Tert-amyl alcohol	6.95	59	433887	2875.85	ug/L	# 63
26) tetrahydrofuran	6.19	42	274573	300.05	ug/L	94
27) Cyclohexane	6.61	56	564683	23.55	ug/L	# 72
28) tert-amyl methyl ether (TA)	7.08	73	186688	18.35	ug/L	# 73
30) methyl methacrylate	7.87	69	158389	86.10	ug/L	90
31) Methylcyclohexane	7.80	55	420775	25.80	ug/L	93
32) 1,4-dioxane	7.89	88	52189	1970.40	ug/L	86
33) Methyl isobutyl ketone(mib)	8.50	43	475097	154.94	ug/L	95
34) ethyl methacrylate	8.84	69	369893	92.59	ug/L	95
35) 2-hexanone	9.10	43	657561	320.43	ug/L	100
37) 5-Methyl-3-heptanone	10.43	43	167434	51.27	ug/L	94
38) cyclohexanone	10.29	55	198878	1140.31	ug/L	94
39) t-1,4-dichloro-2-butene	10.42	75	61347	121.43	ug/L	# 27
40) Ethyl amyl ketone	10.75	57	72956	25.02	ug/L	# 73
41) Pentachloroethane	10.80	167	40327	15.69	ug/L	92
42) benzyl chloride	11.09	91	145825	49.60	ug/L	# 57

(#) = qualifier out of range (m) = manual integration
 20JUL19.D 82605X.M Fri Jul 21 04:13:03 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL19.D Vial: 19
 Acq On : 20 Jul 2017 2:41 pm Operator: MGC
 Sample : 1712752-CALA Inst : MS-V5
 Misc : 1 VO-109-70527;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 21 4:12 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-1232\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Tue Jul 11 13:50:19 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL20.D
 Acq On : 20 Jul 2017 3:04 pm
 Sample : 1712752-CALB
 Misc : 1 VO-109-70528;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 21 4:13 2017

Vial: 20
 Operator: MGC
 Inst : MS-V5
 Multipllr: 1.00

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Tue Jul 11 13:50:19 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	174621	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	263233	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	69099	10.00	ug/L	0.00

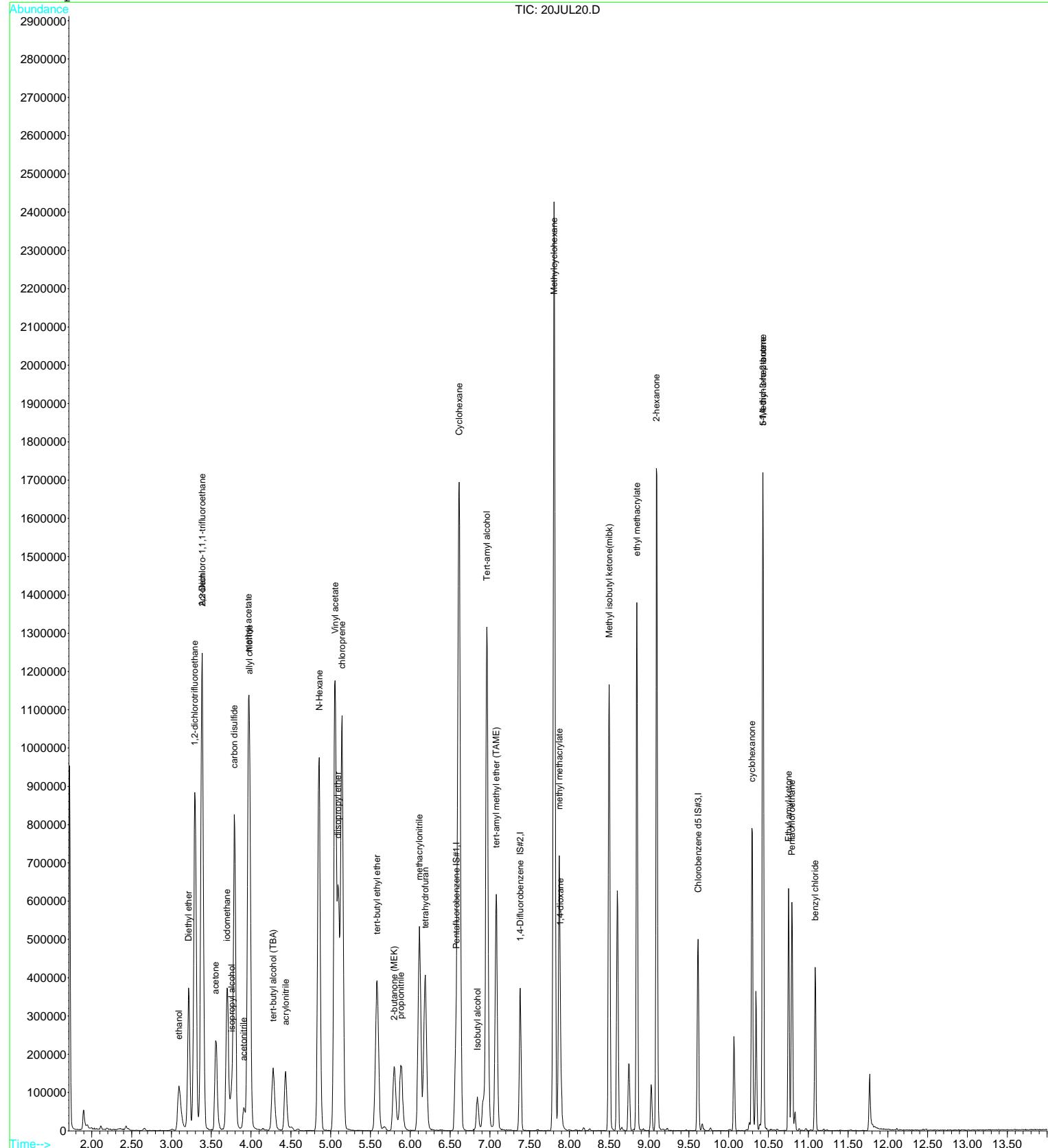
Target Compounds					Qvalue
2) ethanol	3.09	45	205730	7775.90	ug/L # 43
3) 2,2-Dichloro-1,1,1-trifluo	3.39	83	860452	51.70	ug/L # 76
4) 1,2-dichlorotrifluoroethan	3.29	67	590714	53.27	ug/L # 85
5) Diethyl ether	3.22	59	235219	51.00	ug/L 83
6) isopropyl alcohol	3.75	45	195278	1567.58	ug/L # 8
7) Acrolein	3.39	56	108941	245.71	ug/L # 69
8) acetone	3.55	43	344325	439.08	ug/L 95
9) tert-butyl alcohol (TBA)	4.28	59	252324	1550.67	ug/L 100
10) acetonitrile	3.91	41	83903	230.26	ug/L # 26
11) methyl acetate	3.96	43	1128055	525.19	ug/L 94
12) allyl chloride	3.98	41	862980	49.23	ug/L 96
13) iodomethane	3.70	142	539359	50.07	ug/L 98
14) acrylonitrile	4.44	53	154090	121.14	ug/L 95
15) carbon disulfide	3.79	76	1271472	47.91	ug/L 97
16) N-Hexane	4.86	57	623461	53.24	ug/L # 83
17) diisopropyl ether	5.10	87	157252	24.25	ug/L 89
18) Vinyl acetate	5.06	43	2385200	281.42	ug/L # 96
19) chloroprene	5.14	53	902085	47.31	ug/L 94
20) tert-butyl ethyl ether	5.58	59	505113	28.57	ug/L 95
21) 2-butanone (MEK)	5.80	43	302620	226.44	ug/L # 87
22) propionitrile	5.88	54	276513	606.77	ug/L # 89
23) Isobutyl alcohol	6.84	43	69599	909.31	ug/L # 76
24) methacrylonitrile	6.12	67	274890	234.12	ug/L 89
25) Tert-amyl alcohol	6.96	59	913464	5837.98	ug/L # 61
26) tetrahydrofuran	6.19	42	401837	448.07	ug/L 93
27) Cyclohexane	6.61	56	1165061	49.58	ug/L # 72
28) tert-amyl methyl ether (TA	7.08	73	285000	28.58	ug/L # 70
30) methyl methacrylate	7.87	69	241996	134.69	ug/L 95
31) Methylcyclohexane	7.81	55	877587	55.09	ug/L 93
32) 1,4-dioxane	7.89	88	73893	2856.51	ug/L 86
33) Methyl isobutyl ketone(mib	8.50	43	701682	234.30	ug/L 94
34) ethyl methacrylate	8.85	69	550973	141.22	ug/L 95
35) 2-hexanone	9.09	43	935679	466.85	ug/L 98
37) 5-Methyl-3-heptanone	10.43	43	334691	106.74	ug/L 94
38) cyclohexanone	10.29	55	313653	1873.15	ug/L 95
39) t-1,4-dichloro-2-butene	10.42	75	102481	180.83	ug/L # 20
40) Ethyl amyl ketone	10.75	57	152313	54.40	ug/L # 73
41) Pentachloroethane	10.79	167	70897	27.38	ug/L 91
42) benzyl chloride	11.09	91	232501	69.65	ug/L # 55

(#) = qualifier out of range (m) = manual integration
 20JUL20.D 82605X.M Fri Jul 21 04:13:26 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL20.D Vial: 20
 Acq On : 20 Jul 2017 3:04 pm Operator: MGC
 Sample : 1712752-CALB Inst : MS-V5
 Misc : 1 VO-109-70528;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 21 4:13 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-1232\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Tue Jul 11 13:50:19 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL21.D
 Acq On : 20 Jul 2017 3:27 pm
 Sample : 1712752-CALC
 Misc : 1 VO-109-70529;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 21 4:13 2017

Vial: 21
 Operator: MGC
 Inst : MS-V5
 Multipllr: 1.00

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Tue Jul 11 13:50:19 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	191859	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	287684	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	76272	10.00	ug/L	0.00

Target Compounds

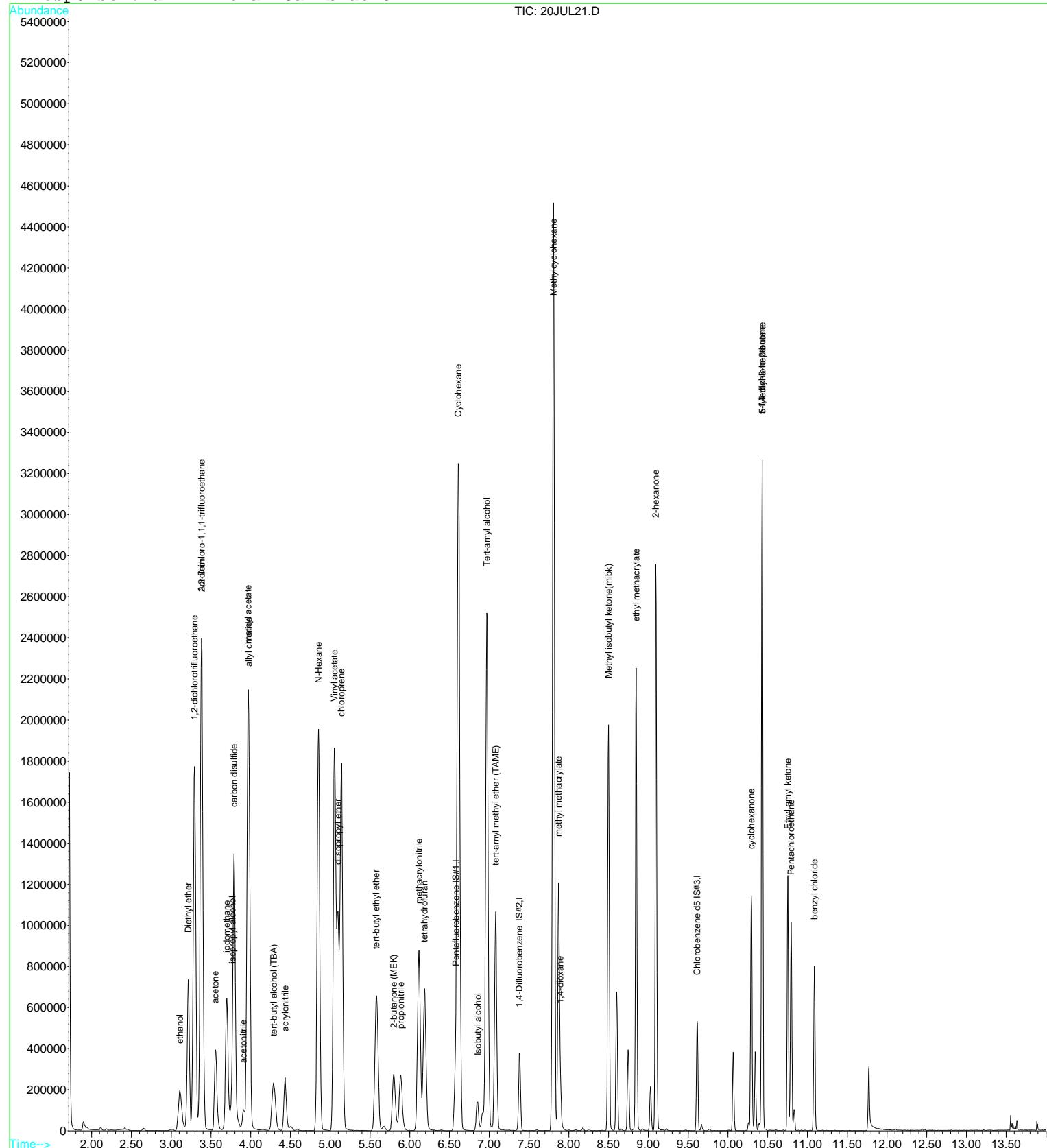
				Qvalue	
2) ethanol	3.11	45	343157	11804.84	ug/L # 40
3) 2,2-Dichloro-1,1,1-trifluo	3.38	83	1694547	92.67	ug/L # 75
4) 1,2-dichlorotrifluoroethan	3.29	67	1178349	96.72	ug/L # 85
5) Diethyl ether	3.22	59	472236	93.20	ug/L 82
6) isopropyl alcohol	3.77	45	317937	2322.91	ug/L # 6
7) Acrolein	3.39	56	180190	369.90	ug/L # 72
8) acetone	3.56	43	577159	669.86	ug/L 96
9) tert-butyl alcohol (TBA)	4.29	59	450091	2517.53	ug/L 100
10) acetonitrile	3.91	41	136990	342.17	ug/L # 27
11) methyl acetate	3.97	43	2174902	921.60	ug/L 91
12) allyl chloride	3.98	41	1442058	74.88	ug/L 97
13) iodomethane	3.70	142	960471	81.15	ug/L 99
14) acrylonitrile	4.43	53	249855	178.78	ug/L 95
15) carbon disulfide	3.79	76	2158751	74.03	ug/L 97
16) N-Hexane	4.85	57	1257523	97.74	ug/L # 84
17) diisopropyl ether	5.10	87	262020	36.77	ug/L 91
18) Vinyl acetate	5.05	43	3834502	411.77	ug/L # 95
19) chloroprene	5.14	53	1510657	72.11	ug/L 96
20) tert-butyl ethyl ether	5.58	59	868719	44.72	ug/L 93
21) 2-butanone (MEK)	5.79	43	505064	343.97	ug/L # 87
22) propionitrile	5.89	54	430629	860.06	ug/L # 87
23) Isobutyl alcohol	6.85	43	115290	1351.66	ug/L # 76
24) methacrylonitrile	6.12	67	474660	367.94	ug/L 87
25) Tert-amyl alcohol	6.97	59	1893937	10754.08	ug/L # 59
26) tetrahydrofuran	6.18	42	681592	691.73	ug/L 94
27) Cyclohexane	6.61	56	2255697	87.37	ug/L # 73
28) tert-amyl methyl ether (TA	7.08	73	485199	44.28	ug/L # 70
30) methyl methacrylate	7.87	69	415597	211.66	ug/L 97
31) Methylcyclohexane	7.81	55	1673839	96.15	ug/L 94
32) 1,4-dioxane	7.90	88	128386	4541.24	ug/L 89
33) Methyl isobutyl ketone(mib	8.50	43	1152352	352.08	ug/L 93
34) ethyl methacrylate	8.85	69	909414	213.28	ug/L 96
35) 2-hexanone	9.09	43	1491577	680.96	ug/L 96
37) 5-Methyl-3-heptanone	10.43	43	646664	186.84	ug/L 93
38) cyclohexanone	10.29	55	449992	2434.64	ug/L 94
39) t-1,4-dichloro-2-butene	10.43	75	176499	244.62	ug/L # 20
40) Ethyl amyl ketone	10.75	57	306368	99.14	ug/L # 71
41) Pentachloroethane	10.79	167	132243	45.16	ug/L 91
42) benzyl chloride	11.09	91	435458	97.53	ug/L # 54

(#) = qualifier out of range (m) = manual integration
 20JUL21.D 82605X.M Fri Jul 21 04:13:49 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL21.D Vial: 21
 Acq On : 20 Jul 2017 3:27 pm Operator: MGC
 Sample : 1712752-CALC Inst : MS-V5
 Misc : 1 VO-109-70529;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 21 4:13 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-1232\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Tue Jul 11 13:50:19 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL50.D Vial: 50
 Acq On : 18 Jul 2017 12:00 am Operator: MGC
 Sample : 1712538-CALD Inst : MS-V5
 Misc : 1 VO-109-70472;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 18 7:12 2017 Quant Results File: TPPH5.RES

Quant Method : C:\HPCHEM\1...\TPPH5.M (RTE Integrator)
 Title : EPA Method TPPH Gasoline
 Last Update : Thu Jul 06 06:15:28 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	203330	10.00	ug/L	0.00

System Monitoring Compounds

2) PENTAFLUOROBENZENE S 1	6.57	TIC	560010m	5.20	ug/L	0.00
3) 1,2-DICHLOROETHANE d4 S 2	6.92	TIC	196599m	3.33	ug/L	0.00
4) 1,4-DIFLUOROBENZENE S 3	7.38	TIC	759365m	6.84	ug/L	0.00
5) TOLUENE d8 S 4	8.60	TIC	1067752m	11.21	ug/L	0.00
6) CHLOROBENZENE d5 S 5	9.62	TIC	813344m	11.95	ug/L	0.00
7) BROMOFLUOROBENZENE S 6	10.34	TIC	534468m	11.94	ug/L	0.00

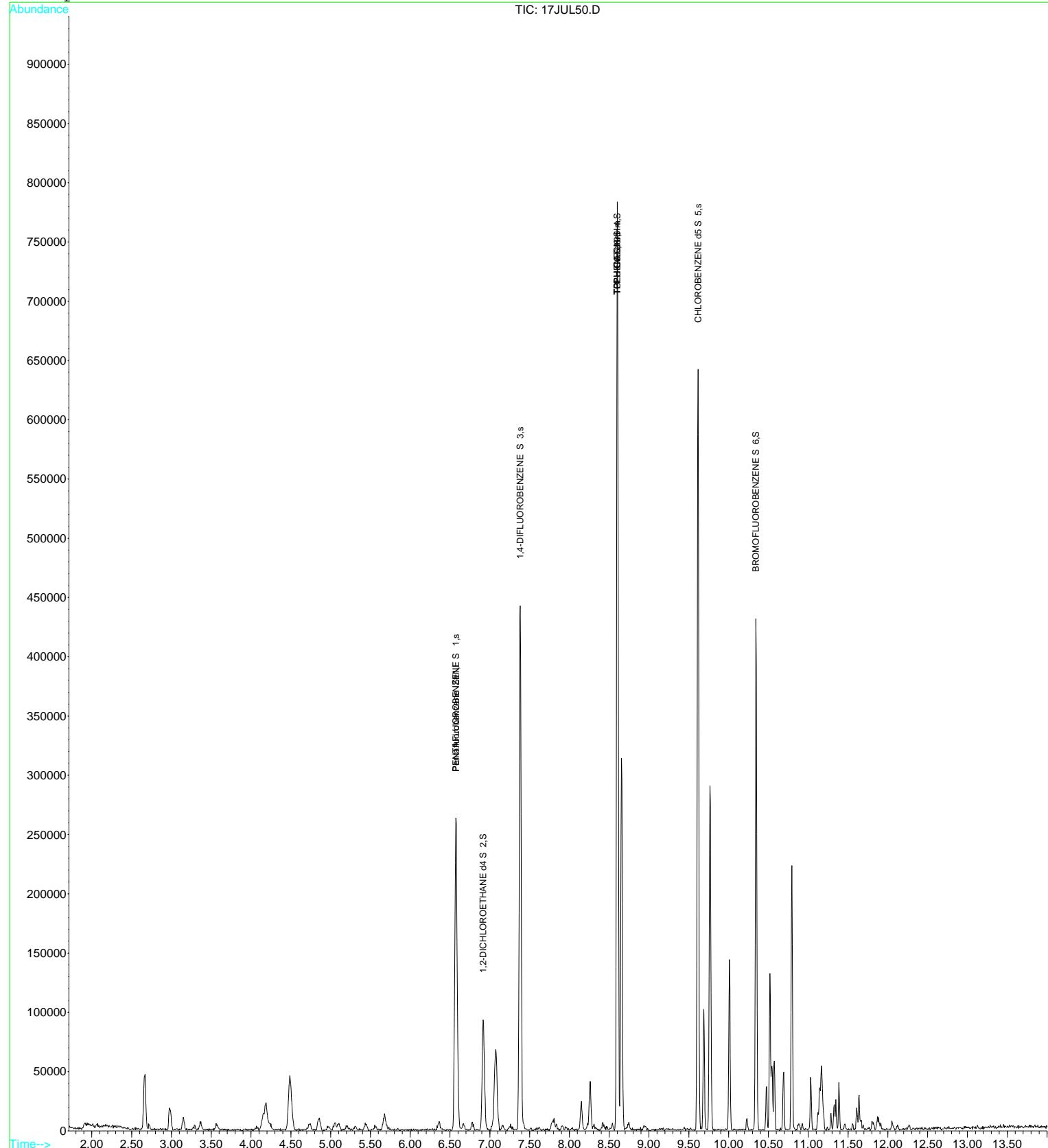
Target Compounds

				Qvalue
8) TPPH-GAS	8.60	TIC	3323551m	57.88 ug/L
9) TPPH C6-C10	8.60	TIC	2289132m	59.15 ug/L

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL50.D Vial: 50
Acq On : 18 Jul 2017 12:00 am Operator: MGC
Sample : 1712538-CALD Inst : MS-V5
Misc : 1 VO-109-70472;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 18 7:12 2017 Quant Results File: TPPH5.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\05-1939\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Thu Jul 06 06:15:28 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL51.D Vial: 51
 Acq On : 18 Jul 2017 12:23 am Operator: MGC
 Sample : 1712538-CALE Inst : MS-V5
 Misc : 1 VO-109-70473;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 18 7:13 2017 Quant Results File: TPPH5.RES

Quant Method : C:\HPCHEM\1...\TPPH5.M (RTE Integrator)
 Title : EPA Method TPPH Gasoline
 Last Update : Thu Jul 06 06:15:28 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	203353	10.00	ug/L	0.00

System Monitoring Compounds

2) PENTAFLUOROBENZENE S 1	6.57	TIC	851300m	7.90	ug/L	0.00
3) 1,2-DICHLOROETHANE d4 S 2	6.93	TIC	412269m	6.97	ug/L	0.00
4) 1,4-DIFLUOROBENZENE S 3	7.38	TIC	997992m	8.99	ug/L	0.00
5) TOLUENE d8 S 4	8.60	TIC	1156175m	12.13	ug/L	0.00
6) CHLOROBENZENE d5 S 5	9.61	TIC	854311m	12.55	ug/L	0.00
7) BROMOFLUOROBENZENE S 6	10.34	TIC	563664m	12.59	ug/L	0.00

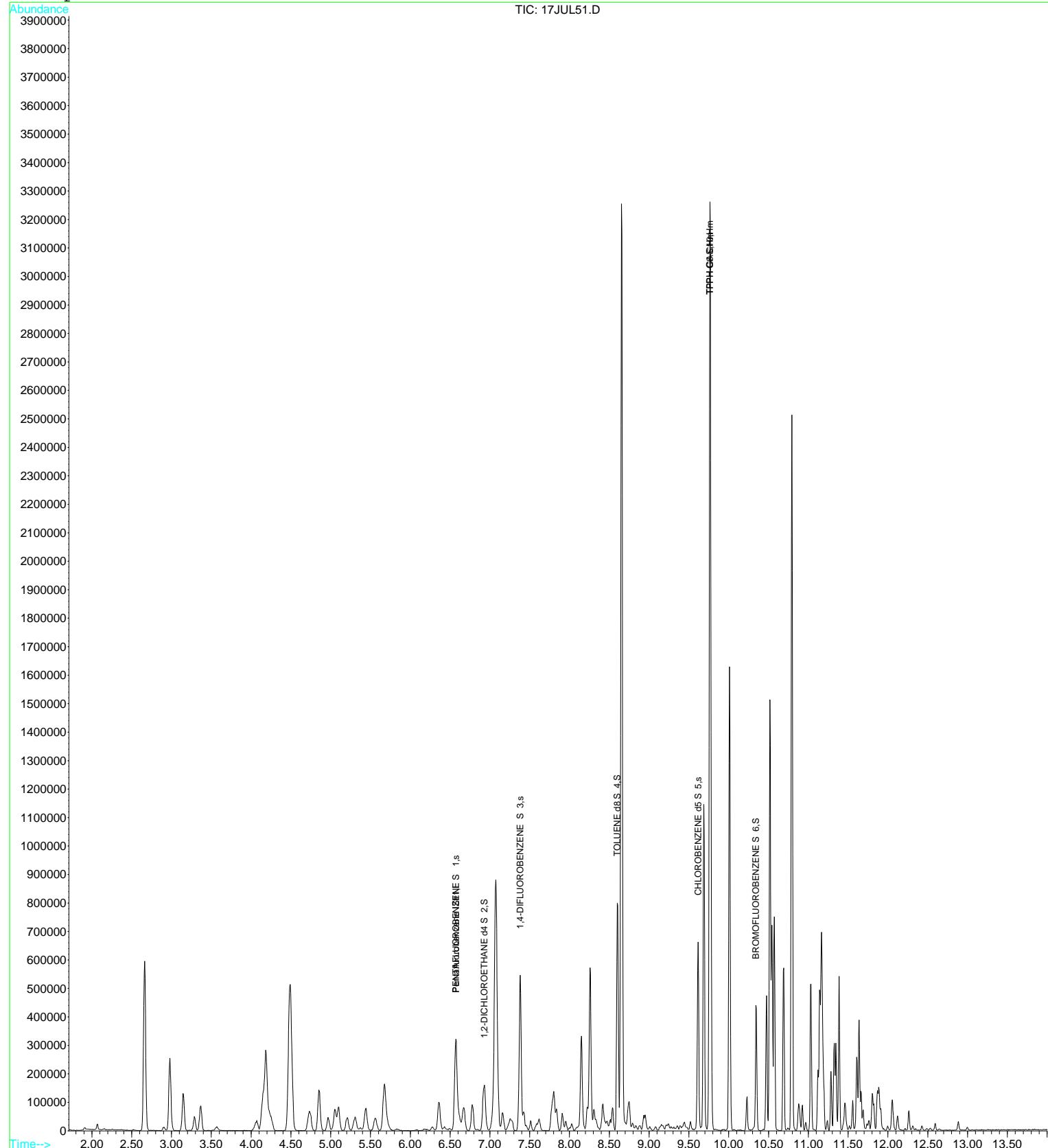
Target Compounds

				Qvalue
8) TPPH-GAS	9.76	TIC	39200624m	682.56 ug/L
9) TPPH C6-C10	9.76	TIC	26681022m	689.37 ug/L

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL51.D Vial: 51
 Acq On : 18 Jul 2017 12:23 am Operator: MGC
 Sample : 1712538-CALE Inst : MS-V5
 Misc : 1 VO-109-70473;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 18 7:13 2017 Quant Results File: TPPH5.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\05-1939\TPPH5.M (RTE Integrator)
 Title : EPA Method TPPH Gasoline
 Last Update : Thu Jul 06 06:15:28 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL52.D Vial: 52
 Acq On : 18 Jul 2017 12:46 am Operator: MGC
 Sample : 1712538-CALF Inst : MS-V5
 Misc : 1 VO-109-70474;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 18 7:16 2017 Quant Results File: TPPH5.RES

Quant Method : C:\HPCHEM\1...\TPPH5.M (RTE Integrator)
 Title : EPA Method TPPH Gasoline
 Last Update : Thu Jul 06 06:15:28 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	209806	10.00	ug/L	0.00

System Monitoring Compounds

2) PENTAFLUOROBENZENE S 1	6.57	TIC	1172463m	10.55	ug/L	0.00
3) 1,2-DICHLOROETHANE d4 S 2	6.93	TIC	663952m	10.89	ug/L	0.00
4) 1,4-DIFLUOROBENZENE S 3	7.38	TIC	1294857m	11.31	ug/L	0.00
5) TOLUENE d8 S 4	8.60	TIC	1296741m	13.19	ug/L	0.00
6) CHLOROBENZENE d5 S 5	9.62	TIC	944425m	13.45	ug/L	0.00
7) BROMOFLUOROBENZENE S 6	10.34	TIC	592237m	12.82	ug/L	0.00

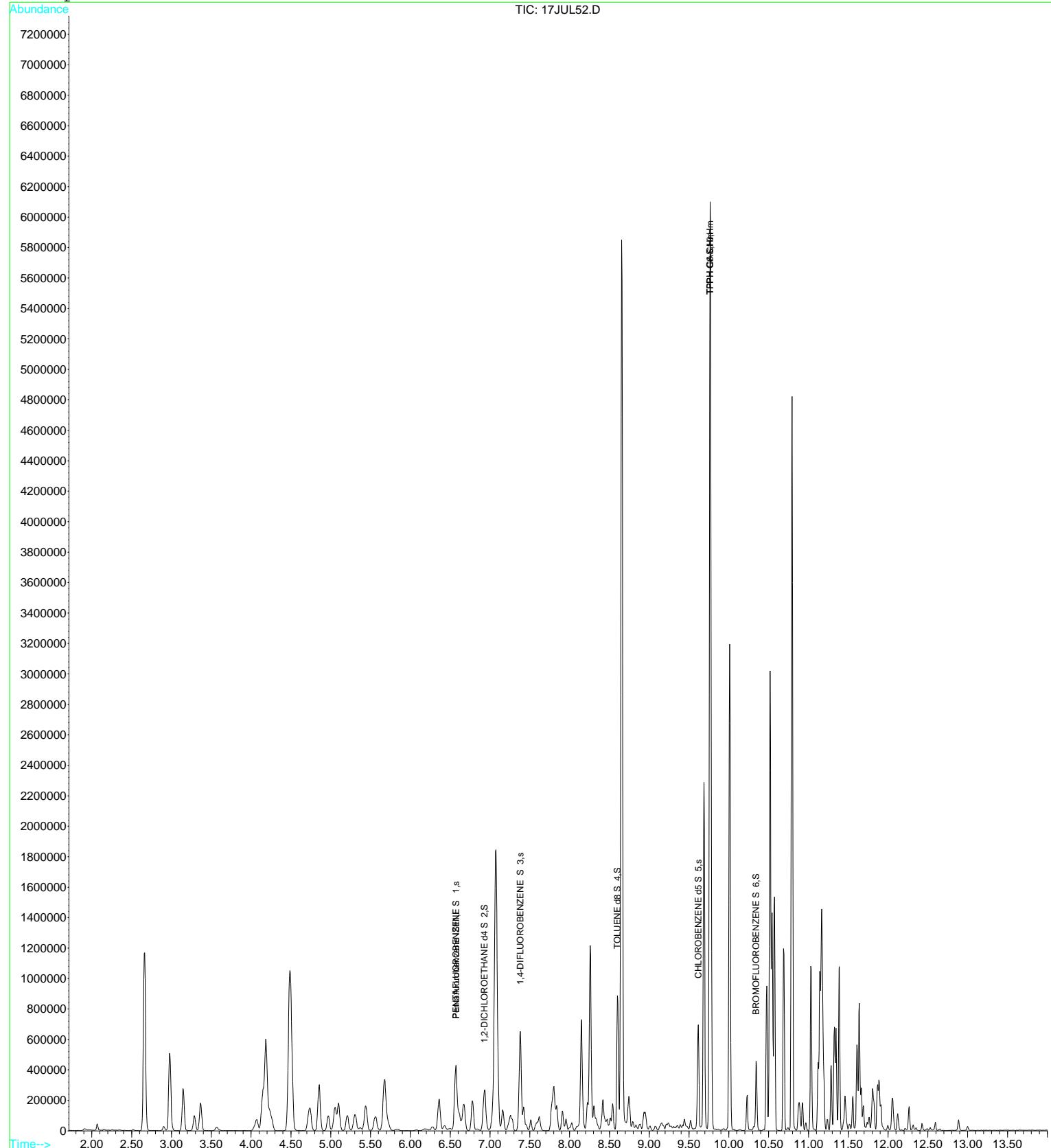
Target Compounds

				Qvalue
8) TPPH-GAS	9.76	TIC	80422572m	1357.26 ug/L
9) TPPH C6-C10	9.76	TIC	54230618m	1358.10 ug/L

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL52.D Vial: 52
 Acq On : 18 Jul 2017 12:46 am Operator: MGC
 Sample : 1712538-CALF Inst : MS-V5
 Misc : 1 VO-109-70474;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 18 7:16 2017 Quant Results File: TPPH5.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\05-1939\TPPH5.M (RTE Integrator)
 Title : EPA Method TPPH Gasoline
 Last Update : Thu Jul 06 06:15:28 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL53.D Vial: 53
 Acq On : 18 Jul 2017 1:09 am Operator: MGC
 Sample : 1712538-CALG Inst : MS-V5
 Misc : 1 VO-109-70475;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 18 7:18 2017 Quant Results File: TPPH5.RES

Quant Method : C:\HPCHEM\1...\TPPH5.M (RTE Integrator)
 Title : EPA Method TPPH Gasoline
 Last Update : Thu Jul 06 06:15:28 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	214428	10.00	ug/L	0.00

System Monitoring Compounds

2) PENTAFLUOROBENZENE S 1	6.57	TIC	1509629m	13.29	ug/L	0.00
3) 1,2-DICHLOROETHANE d4 S 2	6.93	TIC	903792m	14.50	ug/L	0.00
4) 1,4-DIFLUOROBENZENE S 3	7.38	TIC	1605859m	13.72	ug/L	-0.01
5) TOLUENE d8 S 4	8.60	TIC	1364310m	13.58	ug/L	0.00
6) CHLOROBENZENE d5 S 5	9.62	TIC	977979m	13.63	ug/L	0.00
7) BROMOFLUOROBENZENE S 6	10.34	TIC	633462m	13.42	ug/L	0.00

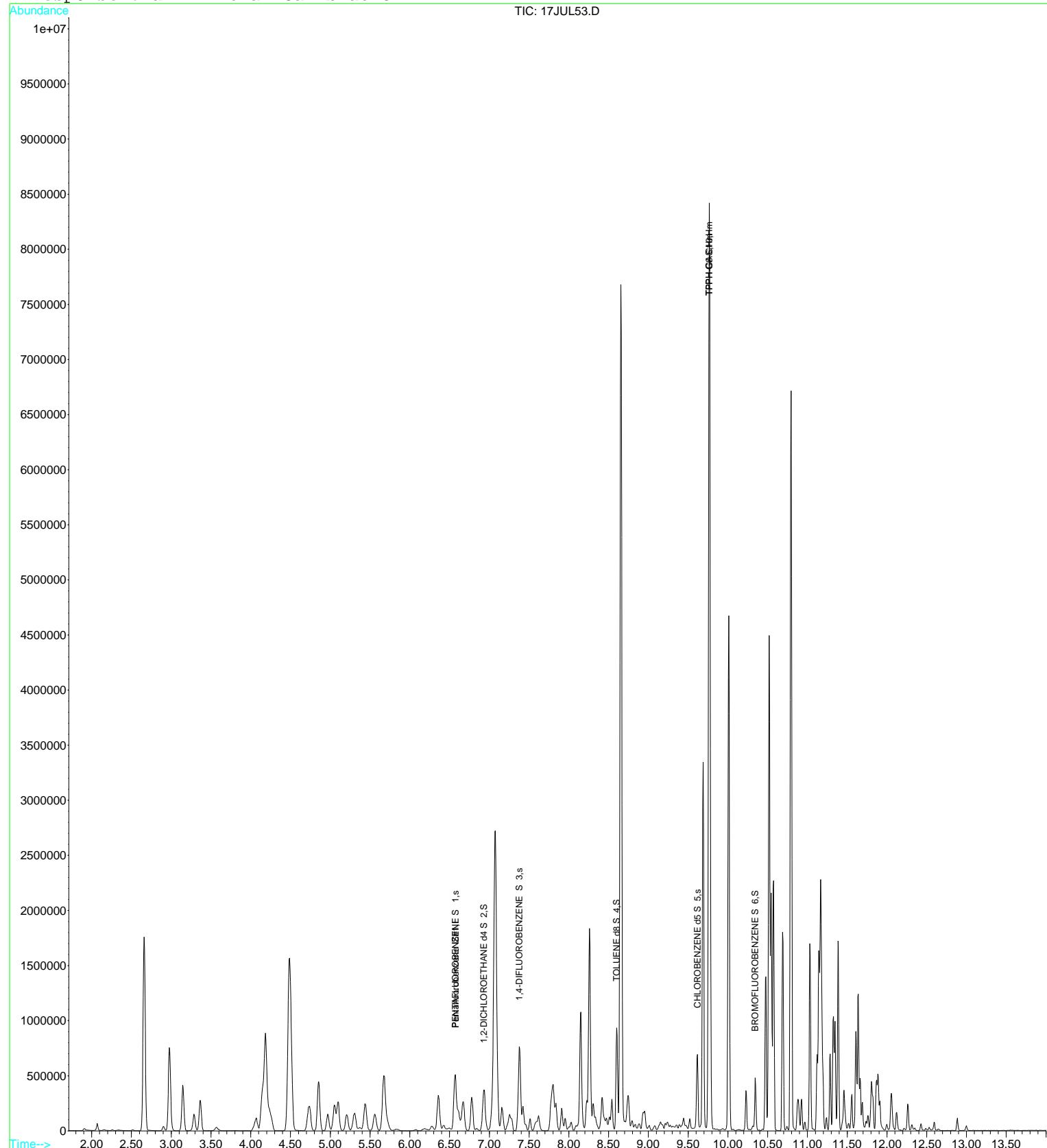
Target Compounds

				Qvalue
8) TPPH-GAS	9.76	TIC	118942110m	1964.06 ug/L
9) TPPH C6-C10	9.76	TIC	79099535m	1938.19 ug/L

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL53.D Vial: 53
Acq On : 18 Jul 2017 1:09 am Operator: MGC
Sample : 1712538-CALG Inst : MS-V5
Misc : 1 VO-109-70475;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 18 7:18 2017 Quant Results File: TPPH5.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\05-1939\TPPH5.M (RTE Integrator)
Title : EPA Method TPPH Gasoline
Last Update : Thu Jul 06 06:15:28 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL54.D Vial: 54
 Acq On : 18 Jul 2017 1:32 am Operator: MGC
 Sample : 1712538-CALH Inst : MS-V5
 Misc : 1 VO-109-70476;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 18 7:19 2017 Quant Results File: TPPH5.RES

Quant Method : C:\HPCHEM\1...\TPPH5.M (RTE Integrator)
 Title : EPA Method TPPH Gasoline
 Last Update : Thu Jul 06 06:15:28 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	210761	10.00	ug/L	0.00

System Monitoring Compounds

2) PENTAFLUOROBENZENE S 1	6.57	TIC	1839700m	16.47	ug/L	-0.01
3) 1,2-DICHLOROETHANE d4 S 2	6.94	TIC	1173334m	19.15	ug/L	0.01
4) 1,4-DIFLUOROBENZENE S 3	7.38	TIC	1898061m	16.50	ug/L	-0.01
5) TOLUENE d8 S 4	8.60	TIC	1544544m	15.64	ug/L	0.00
6) CHLOROBENZENE d5 S 5	9.62	TIC	1056122m	14.97	ug/L	0.00
7) BROMOFLUOROBENZENE S 6	10.34	TIC	631481m	13.61	ug/L	0.00

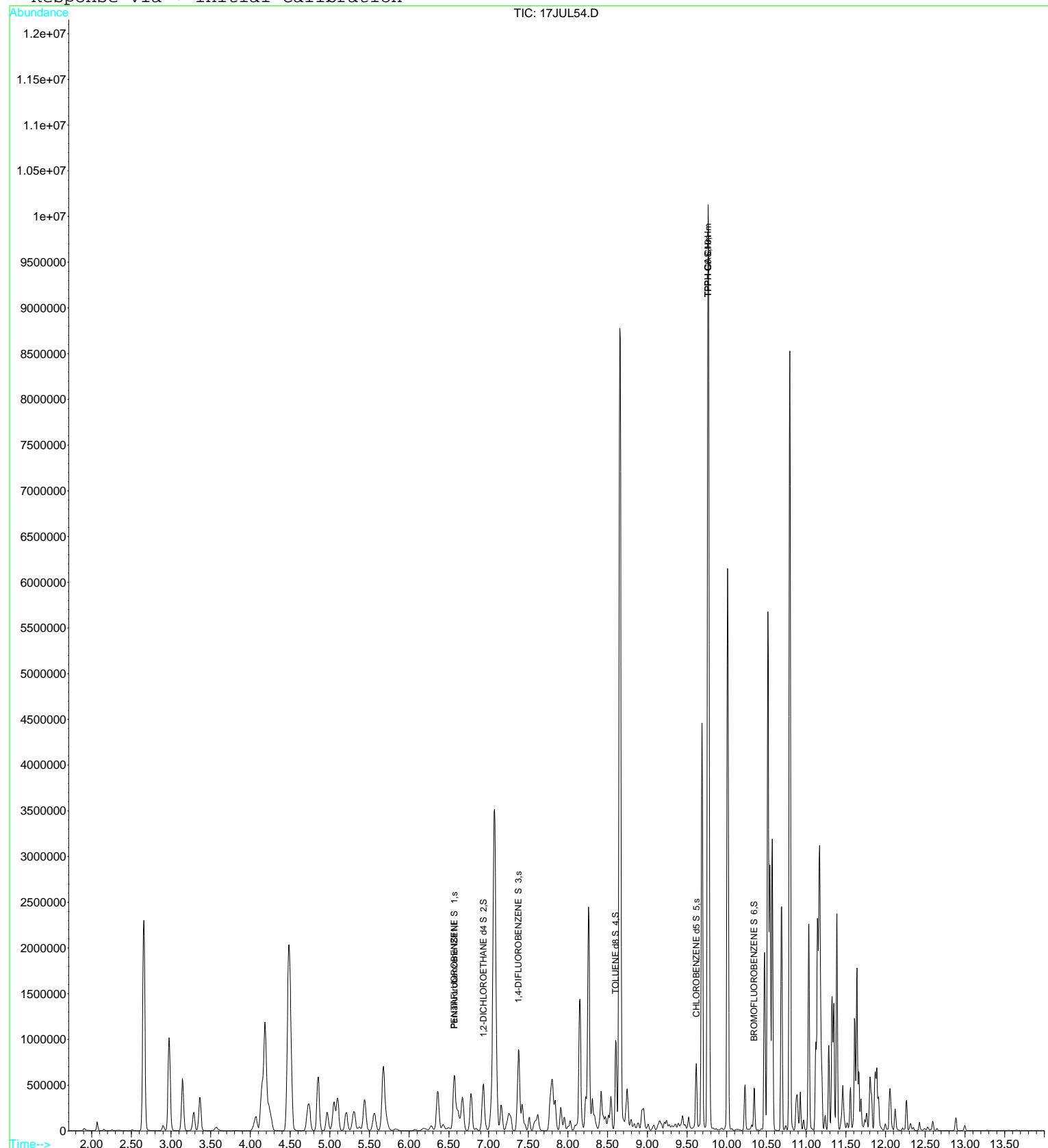
Target Compounds

				Qvalue
8) TPPH-GAS	9.76	TIC	158799376m	2667.84 ug/L
9) TPPH C6-C10	9.76	TIC	104534866m	2606.00 ug/L

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL54.D Vial: 54
 Acq On : 18 Jul 2017 1:32 am Operator: MGC
 Sample : 1712538-CALH Inst : MS-V5
 Misc : 1 VO-109-70476;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 18 7:19 2017 Quant Results File: TPPH5.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\05-1939\TPPH5.M (RTE Integrator)
 Title : EPA Method TPPH Gasoline
 Last Update : Thu Jul 06 06:15:28 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL55.D Vial: 55
 Acq On : 18 Jul 2017 1:55 am Operator: MGC
 Sample : 1712538-CALI Inst : MS-V5
 Misc : 1 VO-109-70477;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 18 7:20 2017 Quant Results File: TPPH5.RES

Quant Method : C:\HPCHEM\1...\TPPH5.M (RTE Integrator)
 Title : EPA Method TPPH Gasoline
 Last Update : Thu Jul 06 06:15:28 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	228564	10.00	ug/L	0.00

System Monitoring Compounds

2) PENTAFLUOROBENZENE S 1	6.57	TIC	2313492m	19.10	ug/L	-0.01
3) 1,2-DICHLOROETHANE d4 S 2	6.93	TIC	1481531m	22.30	ug/L	0.00
4) 1,4-DIFLUOROBENZENE S 3	7.38	TIC	2246811m	18.01	ug/L	-0.01
5) TOLUENE d8 S 4	8.60	TIC	1660426m	15.50	ug/L	0.00
6) CHLOROBENZENE d5 S 5	9.61	TIC	1178573m	15.40	ug/L	0.00
7) BROMOFLUOROBENZENE S 6	10.35	TIC	685683m	13.63	ug/L	0.00

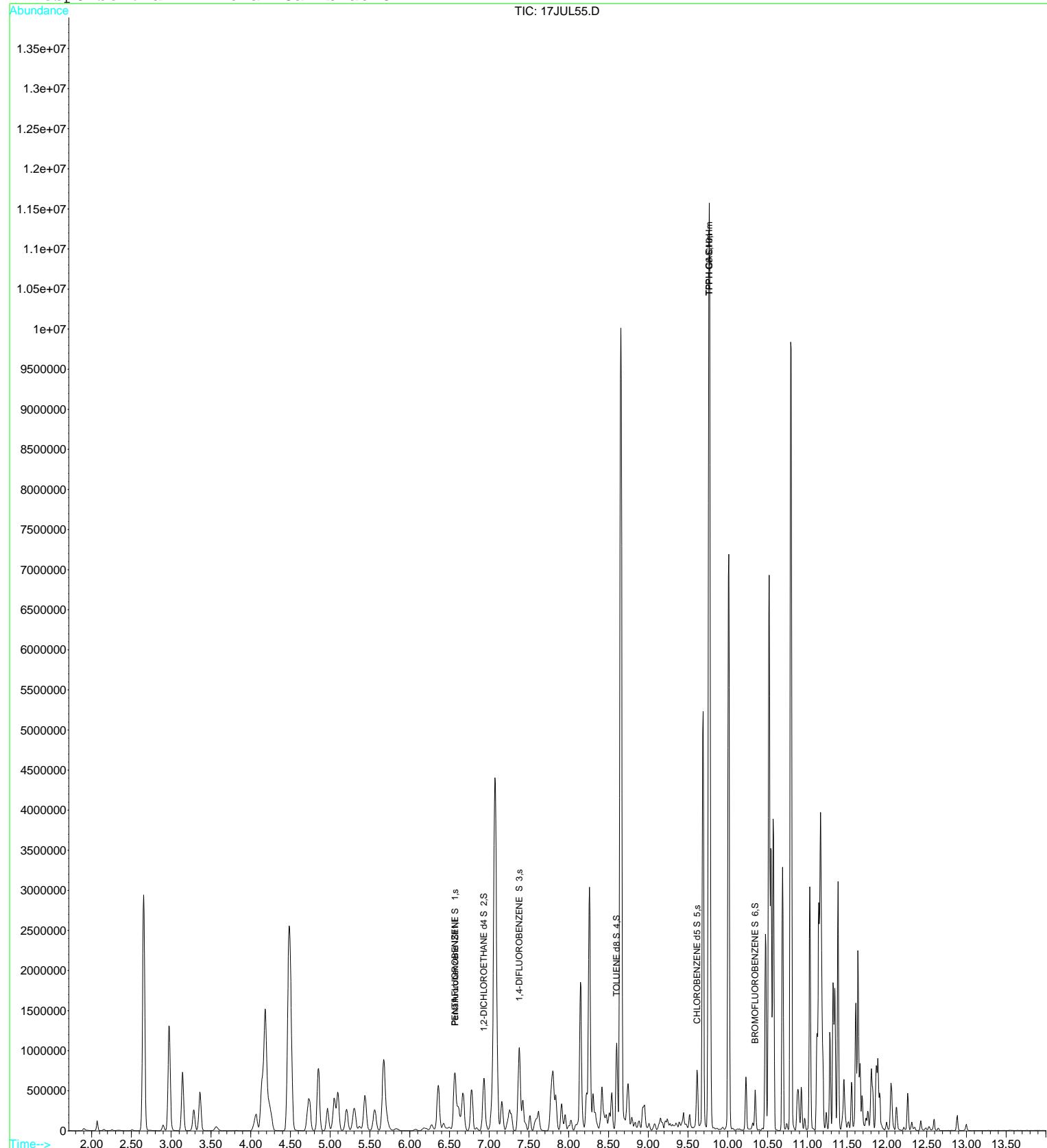
Target Compounds

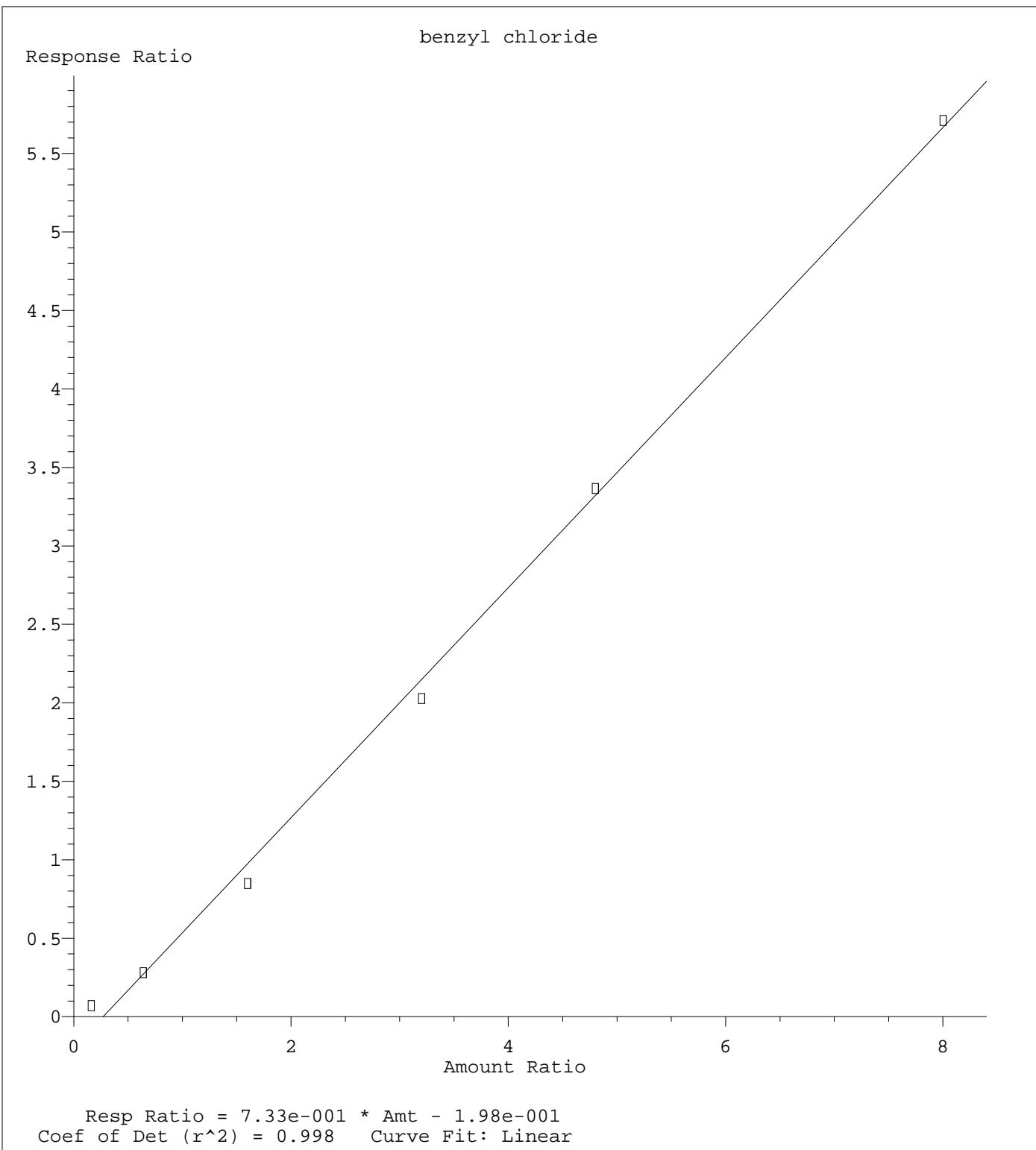
				Qvalue
8) TPPH-GAS	9.77	TIC	198270607m	3071.51 ug/L
9) TPPH C6-C10	9.77	TIC	129763331m	2982.96 ug/L

Quantitation Report

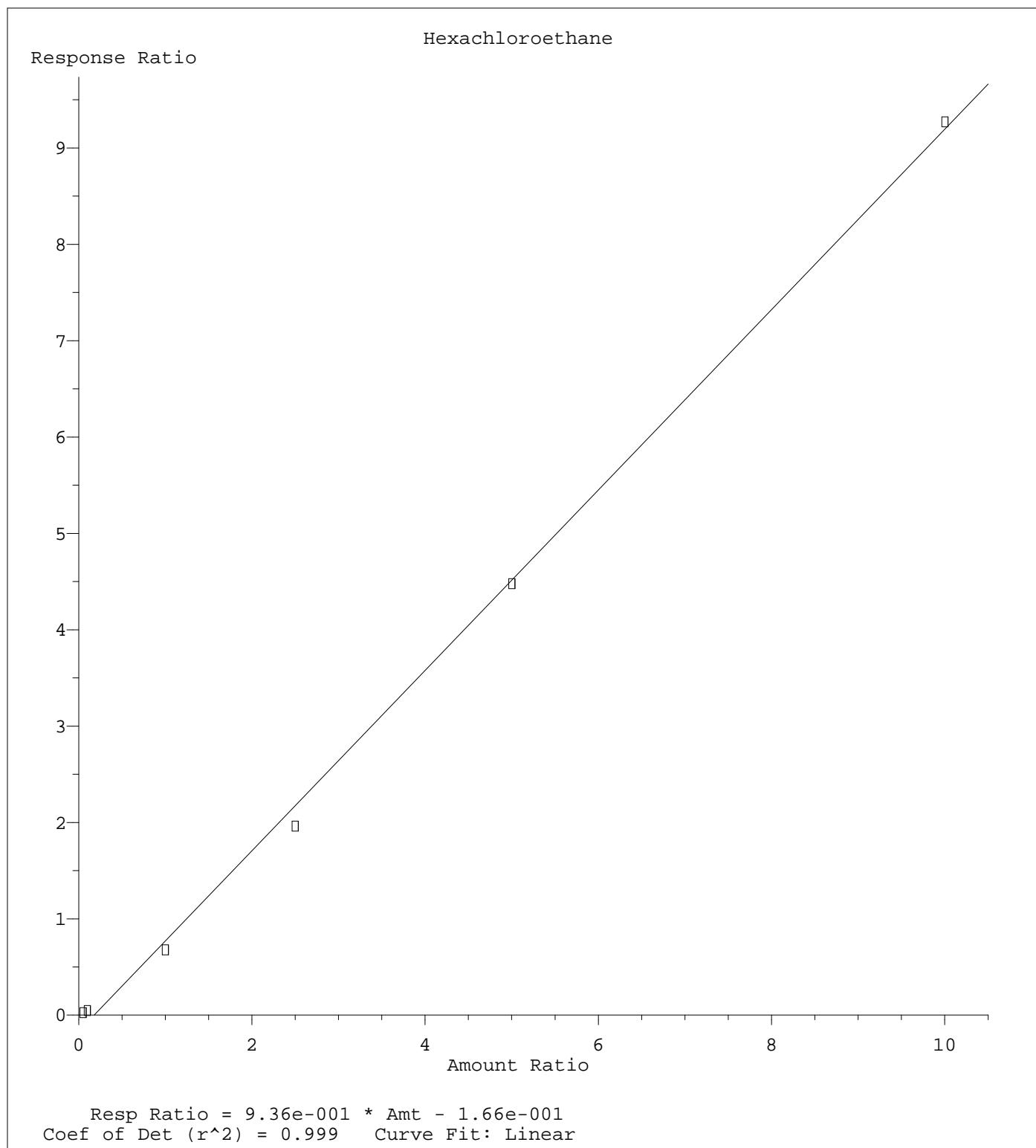
Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL55.D Vial: 55
 Acq On : 18 Jul 2017 1:55 am Operator: MGC
 Sample : 1712538-CALI Inst : MS-V5
 Misc : 1 VO-109-70477;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 18 7:20 2017 Quant Results File: TPPH5.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\05-1939\TPPH5.M (RTE Integrator)
 Title : EPA Method TPPH Gasoline
 Last Update : Thu Jul 06 06:15:28 2017
 Response via : Initial Calibration





Method Name: C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M
Calibration Table Last Updated: Fri Jul 21 04:19:15 2017



Method Name: C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M
Calibration Table Last Updated: Thu Jul 20 11:28:22 2017



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Raw Data - ICV

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL12.D Vial: 12
 Acq On : 20 Jul 2017 12:00 pm Operator: MGC
 Sample : 1712752-ICV1 Inst : MS-V5
 Misc : 1 VO-109-70513;25ML Multipllr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 12:46 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	184644	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	285117	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	74559	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	53963	10.01	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	100.10%
31) Toluene d8 SMC#2	8.60	98	343093	9.74	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.40%
49) Bromofluorobenzene SMC#3	10.34	95	115722	10.39	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	103.90%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	1.76	85	241916	26.33	ug/L
3) Chloromethane	1.95	50	378706	21.80	ug/L
4) Vinyl chloride	2.07	62	338693	24.48	ug/L #
5) Bromomethane	2.44	94	188479	25.11	ug/L #
6) Chloroethane	2.57	64	229100	24.11	ug/L
7) Trichlorofluoromethane	2.87	101	290783	25.57	ug/L
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	206626	26.47	ug/L #
9) 1,1-Dichloroethene	3.51	61	386451	25.94	ug/L
10) Methylene chloride	4.15	84	198309	24.89	ug/L
11) MTBE	4.48	73	285059	25.57	ug/L #
12) T-1,2-dichloroethene	4.50	96	245512	26.54	ug/L
13) 1,1-Dichloroethane	5.05	63	503562	25.49	ug/L
14) 2,2-Dichloropropane	5.82	77	288286	25.93	ug/L
15) Cis-1,2-dichloroethene	5.82	96	244222	25.33	ug/L
16) Bromochloromethane	6.18	128	75372	24.53	ug/L #
17) Chloroform	6.32	83	348453	24.93	ug/L
18) 1,1,1-Trichloroethane	6.53	97	312087	25.79	ug/L #
19) 1,1-Dichloropropene	6.72	75	308677	24.42	ug/L
20) Carbon tetrachloride	6.71	119	211410	25.48	ug/L
22) 1,2-Dichloroethane	7.00	62	183710	24.46	ug/L #
23) Benzene	6.94	78	941279	24.89	ug/L #
25) Trichloroethene	7.60	130	248559	25.39	ug/L
26) 1,2-Dichloropropane	7.83	63	261996	24.22	ug/L
27) Dibromomethane	7.90	93	73001	26.74	ug/L
28) Bromodichloromethane	8.05	83	207514	25.28	ug/L
29) 2-ceve	8.27	63	285733	102.27	ug/L #
30) Cis-1,3-dichloropropene	8.40	75	267335	26.09	ug/L
32) Toluene	8.65	92	616474	24.96	ug/L
33) Trans-1,3-dichloropropene	8.82	75	174804	26.13	ug/L #
34) 1,1,2-Trichloroethane	8.97	97	111939	25.22	ug/L
35) Tetrachloroethene (PCE)	9.03	166	239008	25.47	ug/L
36) 1,3-Dichloropropane	9.08	76	170622	23.67	ug/L
37) Dibromochloromethane	9.23	129	113856	26.55	ug/L #
38) 1,2-Dibromoethane	9.32	107	96637	26.20	ug/L
40) Chlorobenzene	9.64	112	577549	23.36	ug/L
41) 1,1,1,2-Tetrachloroethane	9.69	131	163410	26.86	ug/L
42) Ethylbenzene	9.69	106	374920	25.81	ug/L
43) P+m-Xylene	9.77	106	908616	51.13	ug/L
44) O-Xylene	10.01	106	421259	25.65	ug/L
45) Styrene	10.02	104	662005	26.45	ug/L
46) Bromoform	10.15	173	48942	26.74	ug/L #
47) Isopropylbenzene	10.23	105	1115723	26.25	ug/L
48) 1,1,2,2-Tetrachloroethane	10.40	83	105100	25.92	ug/L
50) 1,2,3-Trichloropropane	10.45	110	22372	25.96	ug/L #
51) n-propylbenzene	10.48	91	1339682	24.27	ug/L

(#) = qualifier out of range (m) = manual integration

20JUL12.D 82605.M Thu Jul 20 12:47:21 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL12.D Vial: 12
 Acq On : 20 Jul 2017 12:00 pm Operator: MGC
 Sample : 1712752-ICV1 Inst : MS-V5
 Misc : 1 VO-109-70513;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 12:46 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	219690	25.23	ug/L	88
53) 1,3,5-trimethylbenzene	10.57	105	949684	27.00	ug/L	93
54) 2-chlorotoluene	10.54	91	842498	24.16	ug/L	98
55) 4-chlorotoluene	10.61	91	767453	24.37	ug/L	96
56) tert-butylbenzene	10.76	119	882705	25.40	ug/L	96
57) 1,2,4-trimethylbenzene	10.79	105	907566	26.05	ug/L	94
58) sec-butylbenzene	10.89	105	1254394	26.64	ug/L	100
59) 4-isopropyltoluene	10.97	119	1024754	26.69	ug/L	97
60) 1,3-Dichlorobenzene	10.97	146	453670	24.34	ug/L	95
61) 1,4-Dichlorobenzene	11.03	146	444088	24.38	ug/L	96
62) n-butylbenzene	11.19	91	933671	26.10	ug/L	99
63) 1,2-Dichlorobenzene	11.23	146	386179	24.02	ug/L	97
64) Hexachloroethane	11.40	117	135394	21.18	ug/L #	69
65) 1,2-dibromo-3-chloropropan	11.67	75	15398	28.17	ug/L	91
66) 1,2,4-trichlorobenzene	12.11	180	251966	27.06	ug/L	100
67) hexachlorobutadiene	12.17	225	162539	25.21	ug/L #	84
68) naphthalene	12.26	128	310035	26.50	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	208438	26.67	ug/L #	89

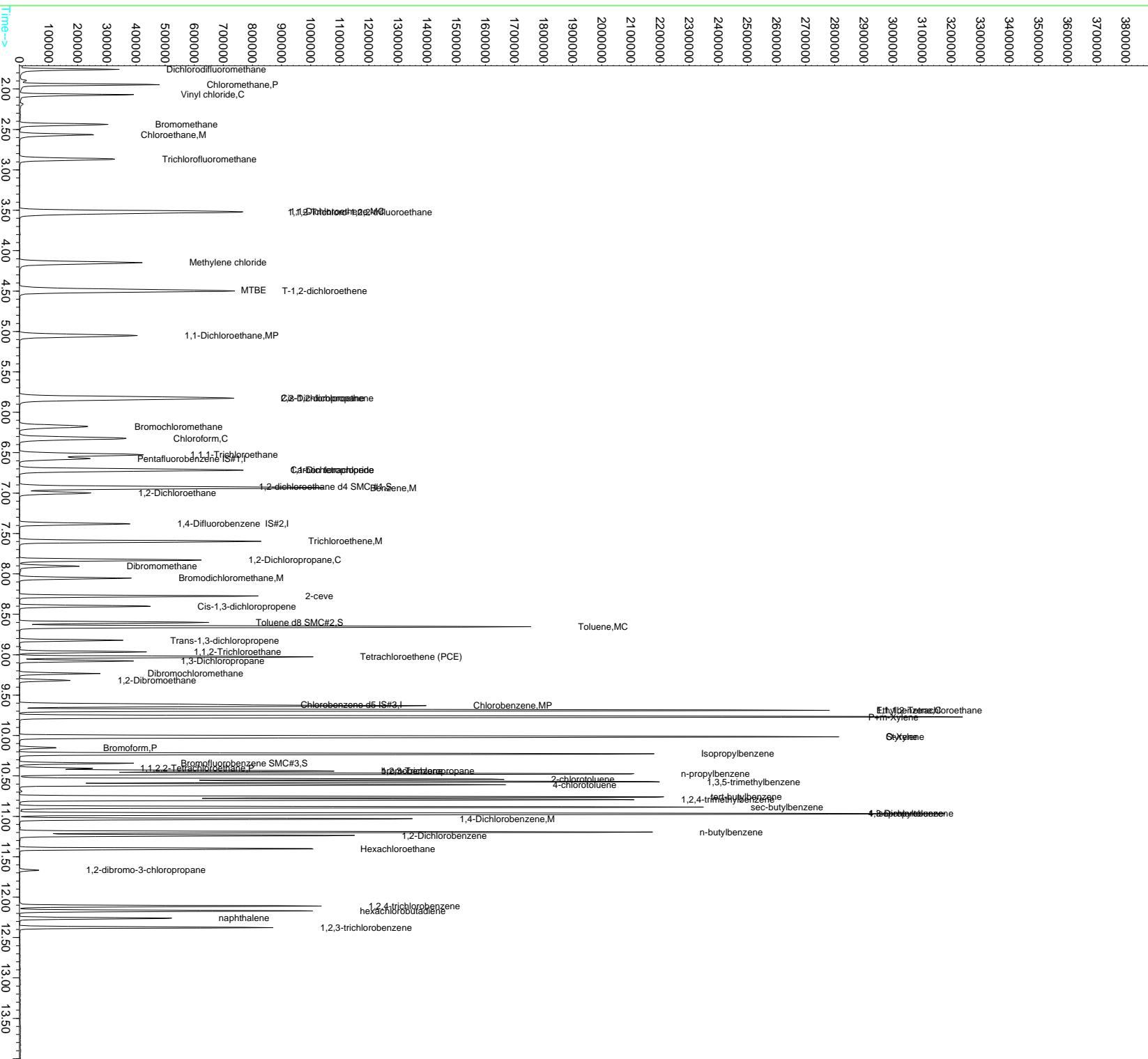
(#) = qualifier out of range (m) = manual integration
 20JUL12.D 82605.M Thu Jul 20 12:47:21 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL12.D Vial: 12
 Acq On : 20 Jul 2017 12:00 pm Operator: MGC
 Sample : 1712752-1CV1 Inst : MS-V5
 Misc : 1 VO-109-70513;25ML Multipl: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 12:46 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration

TIC: 20JUL12.D



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL24.D Vial: 24
 Acq On : 20 Jul 2017 4:36 pm Operator: MGC
 Sample : 1712752-ICV2 Inst : MS-V5
 Misc : 1 VO-109-70530;25ML Multipllr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 21 4:21 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	179876	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	278423	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	74706	10.00	ug/L	0.00

Target Compounds					Qvalue
2) ethanol	3.08	45	127453	3929.60	ug/L # 73
3) 2,2-Dichloro-1,1,1-trifluo	3.38	83	420319	24.64	ug/L # 87
4) 1,2-dichlorotrifluoroethan	3.29	67	292511	24.68	ug/L # 81
5) Diethyl ether	3.22	59	118802	26.41	ug/L 90
6) isopropyl alcohol	3.74	45	122507	819.41	ug/L # 1
7) Acrolein	3.39	56	63185	192.76	ug/L 81
8) acetone	3.56	43	230727	311.29	ug/L 100
9) tert-butyl alcohol (TBA)	4.27	59	165706	778.65	ug/L 100
10) acetonitrile	3.91	41	55234	156.48	ug/L 97
11) methyl acetate	3.97	43	568654	254.75	ug/L 91
12) allyl chloride	3.98	41	557738	30.91	ug/L 98
13) iodomethane	3.70	142	364725	34.40	ug/L 97
14) acrylonitrile	4.43	53	96813	79.22	ug/L 93
15) carbon disulfide	3.79	76	824259	30.22	ug/L 99
16) N-Hexane	4.85	57	287419	24.86	ug/L 87
17) diisopropyl ether	5.09	87	104607	15.56	ug/L 85
18) Vinyl acetate	5.05	43	1569127	149.46	ug/L 97
19) chloroprene	5.14	53	566479	29.87	ug/L 93
20) tert-butyl ethyl ether	5.58	59	328771	14.95	ug/L 98
21) 2-butanone (MEK)	5.79	43	197827	150.32	ug/L 91
22) propionitrile	5.88	54	172476	390.39	ug/L # 88
23) Isobutyl alcohol	6.84	43	44736	438.87	ug/L # 44
24) methacrylonitrile	6.12	67	184168	152.91	ug/L 99
25) Tert-amyl alcohol	6.96	59	447157	2592.35	ug/L 96
26) tetrahydrofuran	6.19	42	263903	298.79	ug/L 92
27) Cyclohexane	6.61	56	558244	23.71	ug/L # 75
28) tert-amyl methyl ether (TA	7.09	73	190513	15.74	ug/L 95
30) methyl methacrylate	7.87	69	159661	76.81	ug/L 92
31) Methylcyclohexane	7.81	55	427662	25.13	ug/L 94
32) 1,4-dioxane	7.89	88	49285	1946.96	ug/L 95
33) Methyl isobutyl ketone(mib	8.50	43	469794	150.81	ug/L 98
34) ethyl methacrylate	8.85	69	360408	75.79	ug/L 97
35) 2-hexanone	9.09	43	633115	300.02	ug/L 95
37) 5-Methyl-3-heptanone	10.43	43	169907	49.65	ug/L 88
38) cyclohexanone	10.29	55	183001	370.13	ug/L 100
39) t-1,4-dichloro-2-butene	10.43	75	62206	79.09	ug/L # 67
40) Ethyl amyl ketone	10.75	57	72626	24.56	ug/L # 79
41) Pentachloroethane	10.79	167	44898	15.02	ug/L 99
42) benzyl chloride	11.09	91	141546	28.55	ug/L 98

(#) = qualifier out of range (m) = manual integration
 20JUL24.D 82605X.M Fri Jul 21 04:21:42 2017

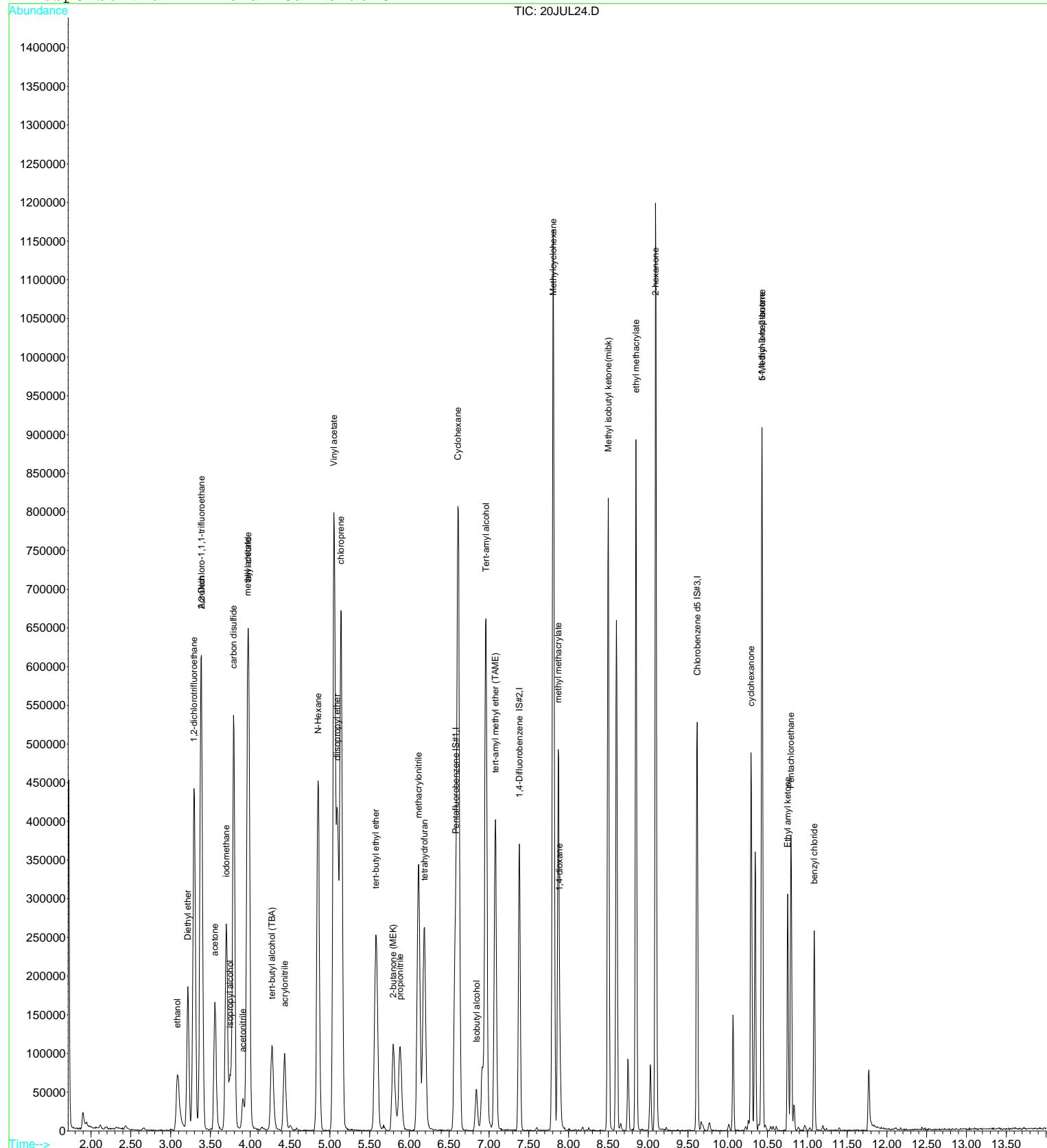
Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL24.D
 Acq On : 20 Jul 2017 4:36 pm
 Sample : 1712752-ICV2
 Misc : 1 VO-109-70530;25ML
 MS Integration Params: rteint.p
 Quant Time: Jul 21 4:21 2017

Vial: 24
 Operator: MGC
 Inst : MS-V5
 Multiplr: 1.00

Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration





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Raw Data - ICB

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL14.D Vial: 14
 Acq On : 20 Jul 2017 12:46 pm Operator: MGC
 Sample : 1712752-ICB1 Inst : MS-V5
 Misc : 1 ICB1;25ML Multipllr: 1.00

MS Integration Params: rteint.p
 Quant Time: Jul 20 13:51 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	181261	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	281231	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	73863	10.00	ug/L	0.00

System Monitoring Compounds

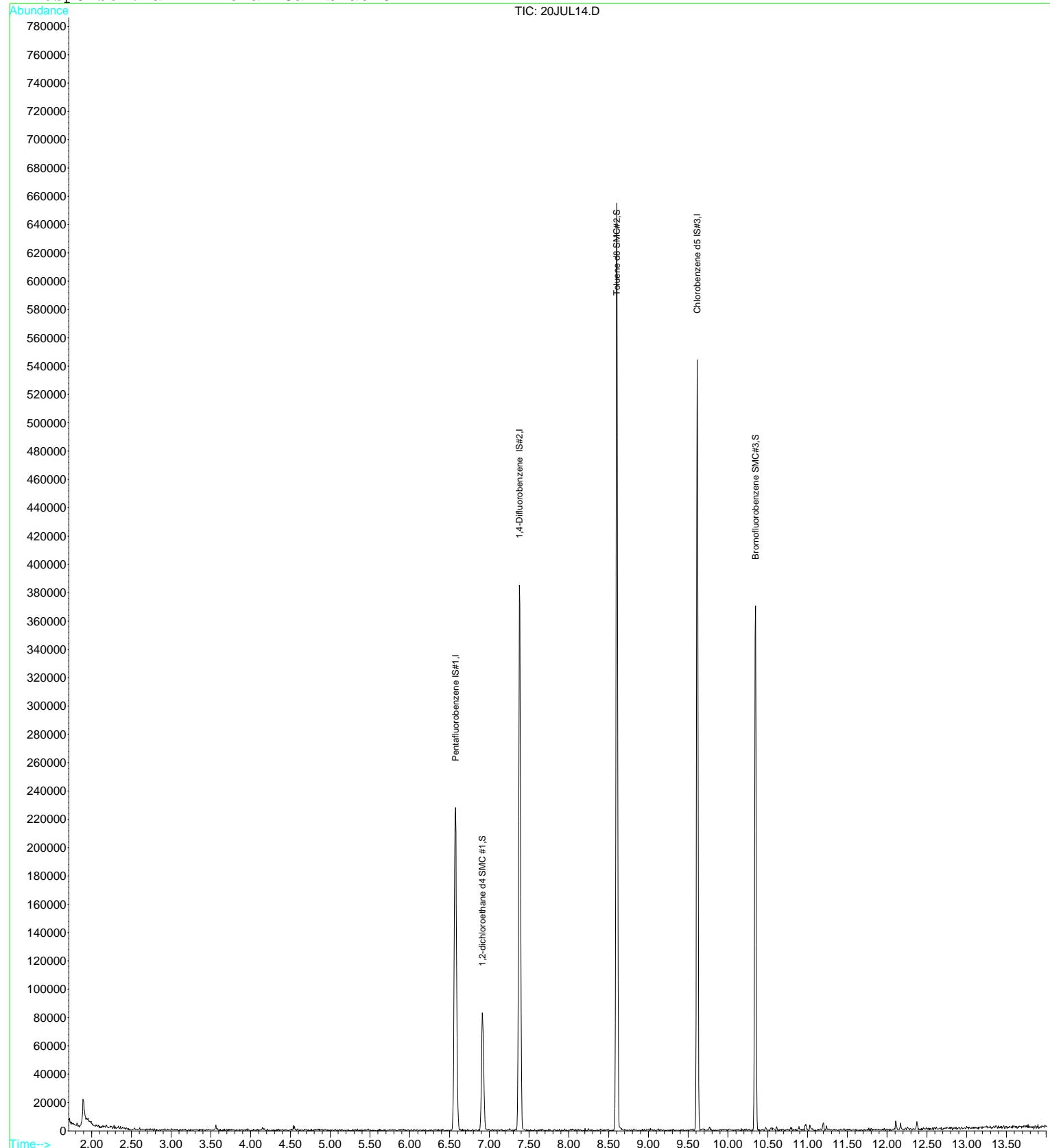
21) 1,2-dichloroethane d4 SMC	6.91	65	55952	10.57	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	105.70%
31) Toluene d8 SMC#2	8.60	98	342270	9.86	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.60%
49) Bromofluorobenzene SMC#3	10.35	95	109375	9.92	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.20%

Target Compounds Qvalue

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL14.D Vial: 14
Acq On : 20 Jul 2017 12:46 pm Operator: MGC
Sample : 1712752-ICB1 Inst : MS-V5
Misc : 1 ICB1;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 20 13:51 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL26.D Vial: 26
Acq On : 20 Jul 2017 5:22 pm Operator: MGC
Sample : 1712752-ICB2 Inst : MS-V5
Misc : 1 ICB2;25ML Multiplr: 1.00

MS Integration Params: rteint.p
Quant Time: Jul 21 4:22 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)

Title : EPA Method 624/8260

Last Update : Fri Jul 21 04:19:15 2017

Response via : Initial Calibration

DataAcq Meth : 82605

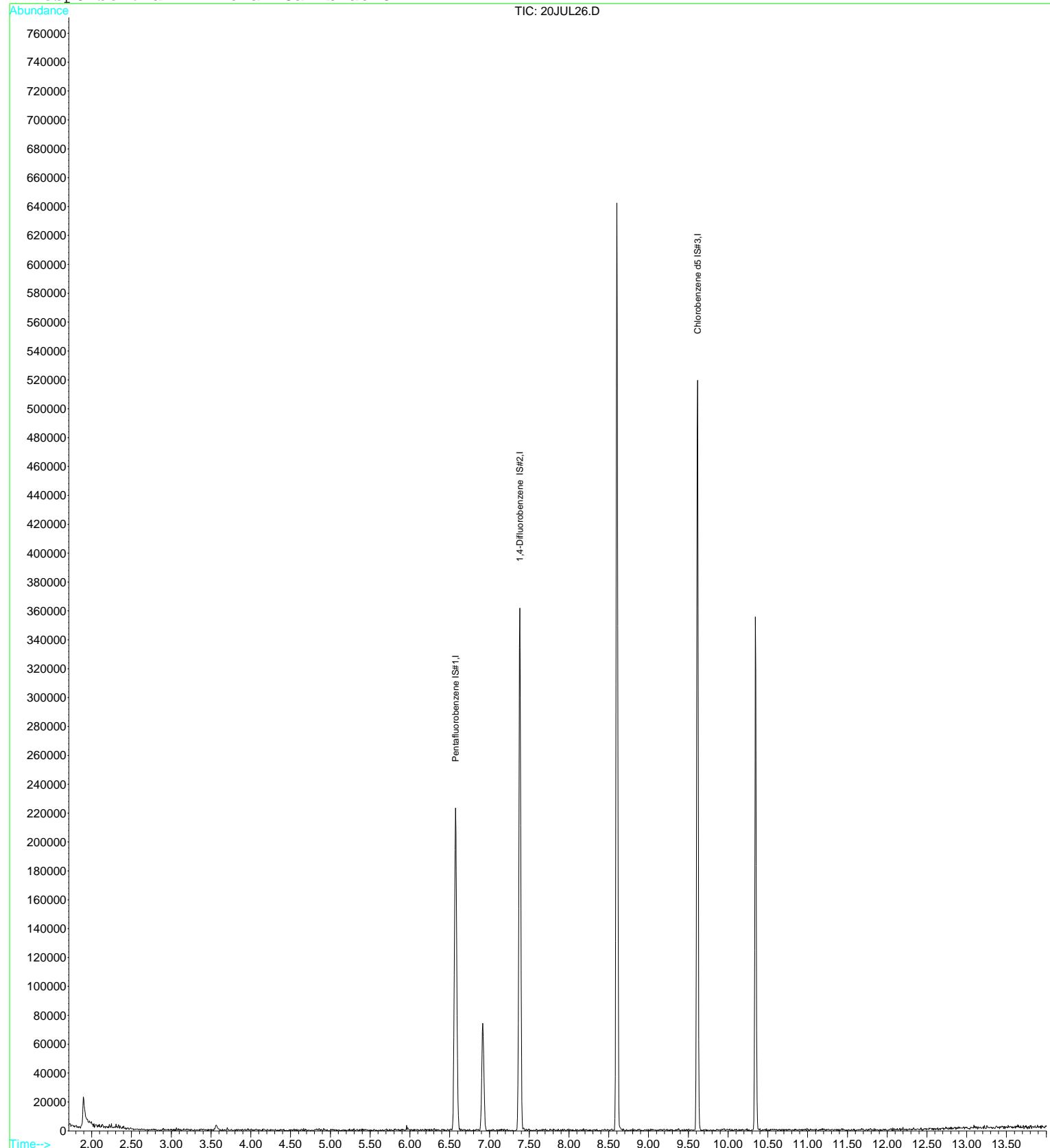
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----	-----	-----	-----	-----	-----	-----
1) Pentafluorobenzene IS#1	6.57	168	171673	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	268403	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	71809	10.00	ug/L	0.00

Target Compounds	Qvalue
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Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL26.D Vial: 26
Acq On : 20 Jul 2017 5:22 pm Operator: MGC
Sample : 1712752-ICB2 Inst : MS-V5
Misc : 1 ICB2;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 21 4:22 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration





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Raw Data - CCV

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL33.D Vial: 33
 Acq On : 28 Jul 2017 7:46 pm Operator: MGC
 Sample : 1713324-CCV3 Inst : MS-V5
 Misc : 1 VO-109-70505;25ML Multipllr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 28 20:00 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	176427	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	268244	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	71039	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	49603	9.63	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	96.30%
31) Toluene d8 SMC#2	8.60	98	324372	9.79	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.90%
49) Bromofluorobenzene SMC#3	10.34	95	105673	9.96	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.60%

Target Compounds

2) Dichlorodifluoromethane	1.76	85	231271	26.34	ug/L	95
3) Chloromethane	1.94	50	340334	20.51	ug/L	99
4) Vinyl chloride	2.07	62	305223	23.09	ug/L	# 67
5) Bromomethane	2.44	94	117587	16.39	ug/L	# 88
6) Chloroethane	2.57	64	205359	22.62	ug/L	96
7) Trichlorofluoromethane	2.87	101	261068	24.03	ug/L	98
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	179197	24.02	ug/L	# 84
9) 1,1-Dichloroethene	3.51	61	329790	23.16	ug/L	95
10) Methylene chloride	4.15	84	177225	23.28	ug/L	98
11) MTBE	4.48	73	249025	23.37	ug/L	# 77
12) T-1,2-dichloroethene	4.50	96	205116	23.21	ug/L	91
13) 1,1-Dichloroethane	5.05	63	432205	22.89	ug/L	99
14) 2,2-Dichloropropane	5.83	77	233923	22.02	ug/L	98
15) Cis-1,2-dichloroethene	5.82	96	216611	23.51	ug/L	93
16) Bromochloromethane	6.18	128	71495	24.35	ug/L	# 87
17) Chloroform	6.33	83	301623	22.58	ug/L	92
18) 1,1,1-Trichloroethane	6.53	97	275996	23.87	ug/L	# 74
19) 1,1-Dichloropropene	6.72	75	282275	23.37	ug/L	95
20) Carbon tetrachloride	6.71	119	190038	23.97	ug/L	# 90
22) 1,2-Dichloroethane	7.00	62	168770	23.52	ug/L	# 86
23) Benzene	6.94	78	851773	23.58	ug/L	# 7
25) Trichloroethene	7.60	130	235772	25.60	ug/L	86
26) 1,2-Dichloropropane	7.83	63	240175	23.60	ug/L	95
27) Dibromomethane	7.91	93	62775	24.44	ug/L	92
28) Bromodichloromethane	8.05	83	185383	24.01	ug/L	91
29) 2-ceve	8.27	63	239797	91.23	ug/L	# 75
30) Cis-1,3-dichloropropene	8.40	75	237041	24.59	ug/L	96
32) Toluene	8.65	92	551122	23.72	ug/L	94
33) Trans-1,3-dichloropropene	8.82	75	156976	24.94	ug/L	# 85
34) 1,1,2-Trichloroethane	8.97	97	97210	23.28	ug/L	85
35) Tetrachloroethene (PCE)	9.03	166	209658	23.75	ug/L	95
36) 1,3-Dichloropropane	9.08	76	158858	23.42	ug/L	94
37) Dibromochloromethane	9.23	129	105877	26.24	ug/L	# 94
38) 1,2-Dibromoethane	9.32	107	82405	23.74	ug/L	95
40) Chlorobenzene	9.63	112	561234	23.82	ug/L	89
41) 1,1,1,2-Tetrachloroethane	9.69	131	151617	26.15	ug/L	99
42) Ethylbenzene	9.69	106	331769	23.97	ug/L	85
43) P+m-Xylene	9.77	106	806599	47.64	ug/L	99
44) O-Xylene	10.01	106	381672	24.39	ug/L	89
45) Styrene	10.02	104	588445	24.68	ug/L	93
46) Bromoform	10.15	173	46269	26.53	ug/L	# 100
47) Isopropylbenzene	10.23	105	987293	24.38	ug/L	98
48) 1,1,2,2-Tetrachloroethane	10.41	83	91107	23.59	ug/L	95
50) 1,2,3-Trichloropropane	10.45	110	21452	26.12	ug/L	# 13
51) n-propylbenzene	10.47	91	1190960	22.64	ug/L	93

(#= qualifier out of range (m) = manual integration

28JUL33.D 82605.M Sat Jul 29 08:37:08 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL33.D Vial: 33
 Acq On : 28 Jul 2017 7:46 pm Operator: MGC
 Sample : 1713324-CCV3 Inst : MS-V5
 Misc : 1 VO-109-70505;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 28 20:00 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	199488	24.05	ug/L	93
53) 1,3,5-trimethylbenzene	10.57	105	807781	24.10	ug/L	92
54) 2-chlorotoluene	10.54	91	787418	23.70	ug/L	99
55) 4-chlorotoluene	10.61	91	712870	23.76	ug/L	97
56) tert-butylbenzene	10.76	119	855882	25.85	ug/L	98
57) 1,2,4-trimethylbenzene	10.79	105	781912	23.56	ug/L	94
58) sec-butylbenzene	10.89	105	1105280	24.64	ug/L	99
59) 4-isopropyltoluene	10.96	119	873154	23.87	ug/L	97
60) 1,3-Dichlorobenzene	10.97	146	436329	24.57	ug/L	93
61) 1,4-Dichlorobenzene	11.03	146	425322	24.51	ug/L	94
62) n-butylbenzene	11.19	91	769183	22.56	ug/L	99
63) 1,2-Dichlorobenzene	11.24	146	377141	24.62	ug/L	96
64) Hexachloroethane	11.40	117	133291	21.83	ug/L #	71
65) 1,2-dibromo-3-chloropropan	11.67	75	11261	21.63	ug/L	98
66) 1,2,4-trichlorobenzene	12.11	180	209688	23.63	ug/L	98
67) hexachlorobutadiene	12.17	225	145526	23.69	ug/L #	84
68) naphthalene	12.26	128	255573	22.93	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	174647	23.45	ug/L #	92

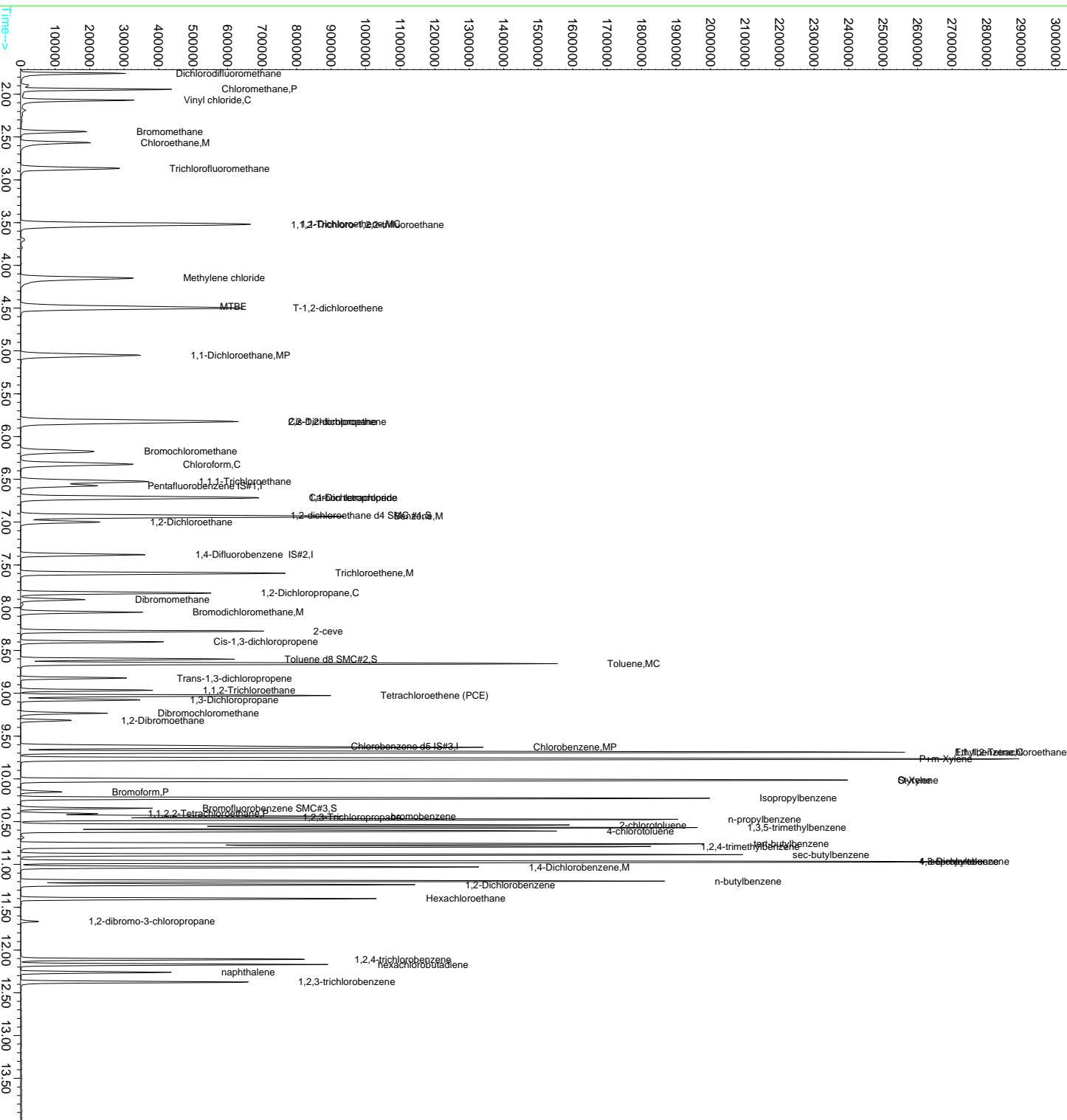
(#) = qualifier out of range (m) = manual integration
 28JUL33.D 82605.M Sat Jul 29 08:37:08 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL33.D Vial: 33
 Acq On : 28 Jul 2017 7:46 pm Operator: MGC
 Sample : 1713324-CCV3 Inst: MS-V5
 Misc : 1 VO-109-70505;25ML Multipl: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 28 20:00 2017 Quant Results File: 82605.RES
 Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration

Abundance

TIC: 28JUL33D



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL34.D Vial: 34
 Acq On : 28 Jul 2017 8:09 pm Operator: MGC
 Sample : 1713324-CCV4 Inst : MS-V5
 Misc : 1 VO-109-70519;70520;70521;70522;70523;2 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 8:37 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	177616	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	263542	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	72072	10.00	ug/L	0.00

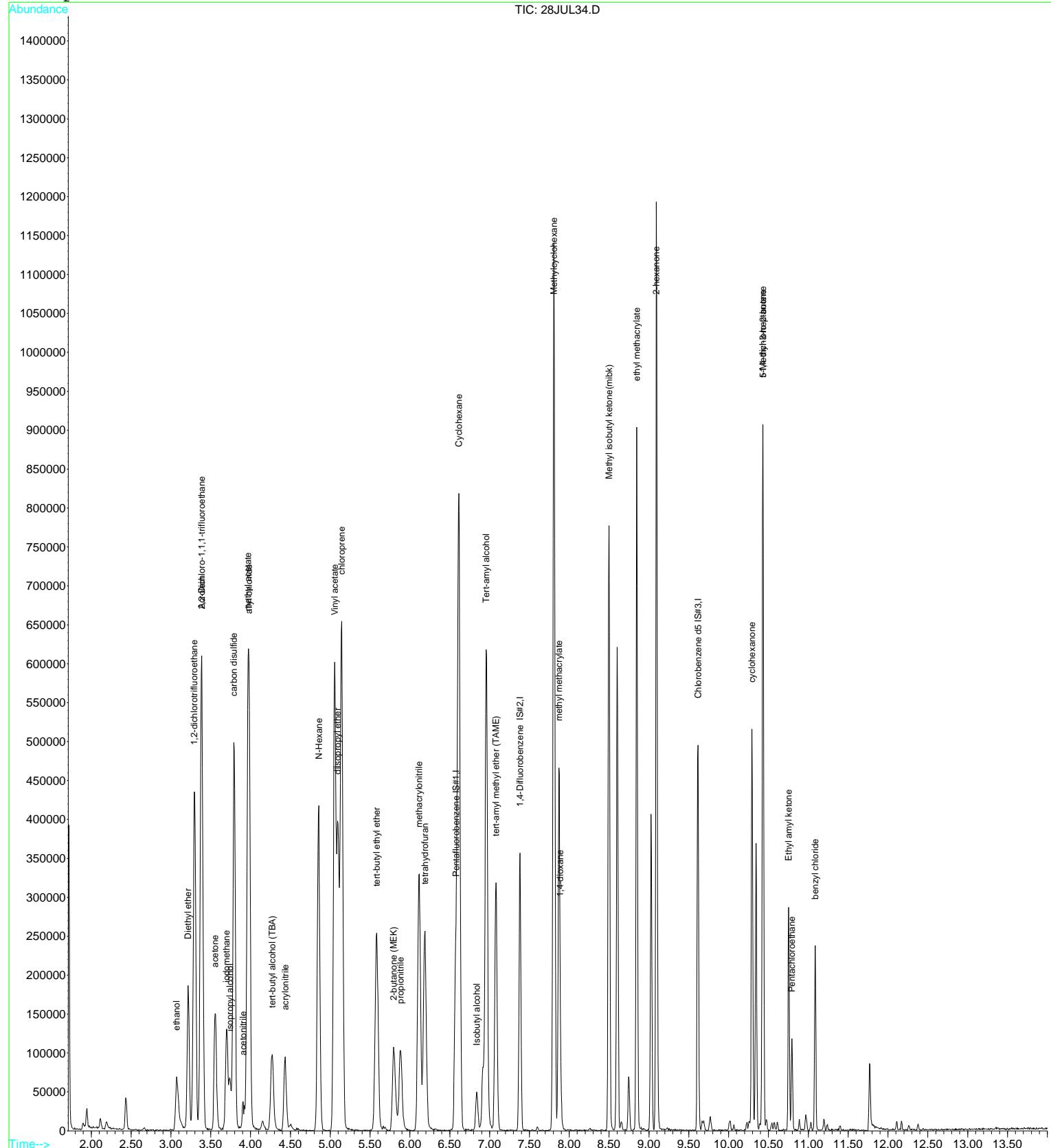
Target Compounds					Qvalue
2) ethanol	3.07	45	112717	3519.48	ug/L # 75
3) 2,2-Dichloro-1,1,1-trifluo	3.39	83	421860	25.05	ug/L # 89
4) 1,2-dichlorotrifluoroethan	3.29	67	285821	24.42	ug/L # 77
5) Diethyl ether	3.22	59	115700	26.05	ug/L 88
6) isopropyl alcohol	3.74	45	109015	738.45	ug/L # 1
7) Acrolein	3.39	56	62314	192.52	ug/L 89
8) acetone	3.55	43	220758	301.63	ug/L 99
9) tert-butyl alcohol (TBA)	4.27	59	154616	735.78	ug/L 100
10) acetonitrile	3.91	41	53005	152.07	ug/L # 54
11) methyl acetate	3.96	43	564050	255.90	ug/L 91
12) allyl chloride	3.99	41	529292	29.71	ug/L 97
13) iodomethane	3.70	142	178280	17.03	ug/L 98
14) acrylonitrile	4.43	53	92382	76.56	ug/L 93
15) carbon disulfide	3.79	76	783110	29.08	ug/L 100
16) N-Hexane	4.86	57	260390	22.81	ug/L 86
17) diisopropyl ether	5.09	87	96044	14.47	ug/L 95
18) Vinyl acetate	5.06	43	1201755	115.93	ug/L 98
19) chloroprene	5.14	53	553591	29.56	ug/L 93
20) tert-butyl ethyl ether	5.58	59	325914	15.01	ug/L 97
21) 2-butanone (MEK)	5.79	43	192609	148.22	ug/L 89
22) propionitrile	5.89	54	165816	380.09	ug/L # 91
23) Isobutyl alcohol	6.84	43	39066	388.13	ug/L # 35
24) methacrylonitrile	6.11	67	177441	149.20	ug/L 99
25) Tert-amyl alcohol	6.96	59	417323	2450.18	ug/L 97
26) tetrahydrofuran	6.19	42	256955	294.63	ug/L 92
27) Cyclohexane	6.61	56	555345	23.89	ug/L # 75
28) tert-amyl methyl ether (TA	7.08	73	178774	14.96	ug/L 91
30) methyl methacrylate	7.87	69	156732	79.65	ug/L 94
31) Methylcyclohexane	7.81	55	413025	25.64	ug/L 93
32) 1,4-dioxane	7.89	88	39517	1649.23	ug/L 94
33) Methyl isobutyl ketone(mib	8.50	43	462092	156.72	ug/L 99
34) ethyl methacrylate	8.85	69	352996	78.42	ug/L 95
35) 2-hexanone	9.09	43	623318	312.06	ug/L 96
37) 5-Methyl-3-heptanone	10.43	43	172650	52.30	ug/L 88
38) cyclohexanone	10.29	55	193399	405.45	ug/L 98
39) t-1,4-dichloro-2-butene	10.43	75	58768	77.45	ug/L # 63
40) Ethyl amyl ketone	10.75	57	71908	25.21	ug/L # 77
41) Pentachloroethane	10.79	167	12291	4.26	ug/L 94
42) benzyl chloride	11.09	91	123681	26.12	ug/L 98

(#) = qualifier out of range (m) = manual integration
 28JUL34.D 82605X.M Sat Jul 29 08:37:45 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL34.D Vial: 34
 Acq On : 28 Jul 2017 8:09 pm Operator: MGC
 Sample : 1713324-CCV4 Inst : MS-V5
 Misc : 1 VO-109-70519;70520;70521;70522;70523;2 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 8:37 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL63.D Vial: 63
 Acq On : 29 Jul 2017 7:16 am Operator: MGC
 Sample : 1713324-CCV5 Inst : MS-V5
 Misc : 1 VO-109-70505;25ML Multipllr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 7:30 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	167483	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	235658	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	62331	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	45857	9.37	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	93.70%
31) Toluene d8 SMC#2	8.60	98	291434	10.01	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	100.10%
49) Bromofluorobenzene SMC#3	10.34	95	88252	9.48	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	94.80%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.76	85	179102	21.49	ug/L	97
3) Chloromethane	1.95	50	308934	19.61	ug/L	99
4) Vinyl chloride	2.07	62	279933	22.30	ug/L	# 66
5) Bromomethane	2.44	94	99428	14.60	ug/L	# 88
6) Chloroethane	2.57	64	179278	20.80	ug/L	97
7) Trichlorofluoromethane	2.87	101	250820	24.32	ug/L	98
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	159718	22.55	ug/L	# 85
9) 1,1-Dichloroethene	3.51	61	308249	22.81	ug/L	95
10) Methylene chloride	4.15	84	162389	22.47	ug/L	98
11) MTBE	4.48	73	210135	20.78	ug/L	# 76
12) T-1,2-dichloroethene	4.50	96	184028	21.93	ug/L	93
13) 1,1-Dichloroethane	5.05	63	393620	21.96	ug/L	99
14) 2,2-Dichloropropane	5.82	77	169488	16.80	ug/L	76
15) Cis-1,2-dichloroethene	5.82	96	189510	21.67	ug/L	93
16) Bromochloromethane	6.17	128	61113	21.92	ug/L	# 88
17) Chloroform	6.32	83	282167	22.25	ug/L	95
18) 1,1,1-Trichloroethane	6.53	97	256685	23.38	ug/L	# 68
19) 1,1-Dichloropropene	6.72	75	255642	22.30	ug/L	94
20) Carbon tetrachloride	6.71	119	181784	24.16	ug/L	92
22) 1,2-Dichloroethane	7.00	62	157260	23.08	ug/L	# 89
23) Benzene	6.93	78	740160	21.58	ug/L	# 8
25) Trichloroethene	7.60	130	221963	27.43	ug/L	89
26) 1,2-Dichloropropane	7.83	63	207928	23.26	ug/L	97
27) Dibromomethane	7.90	93	53810	23.84	ug/L	93
28) Bromodichloromethane	8.05	83	170694	25.16	ug/L	94
29) 2-ceve	8.27	63	201762	87.37	ug/L	# 76
30) Cis-1,3-dichloropropene	8.40	75	195661	23.10	ug/L	96
32) Toluene	8.65	92	501187	24.55	ug/L	91
33) Trans-1,3-dichloropropene	8.82	75	133630	24.17	ug/L	# 84
34) 1,1,2-Trichloroethane	8.97	97	85873	23.41	ug/L	83
35) Tetrachloroethene (PCE)	9.03	166	201561	25.99	ug/L	93
36) 1,3-Dichloropropane	9.08	76	135437	22.73	ug/L	94
37) Dibromochloromethane	9.23	129	91864	25.91	ug/L	# 96
38) 1,2-Dibromoethane	9.32	107	70649	23.17	ug/L	94
40) Chlorobenzene	9.63	112	493482	23.87	ug/L	90
41) 1,1,1,2-Tetrachloroethane	9.69	131	138663	27.26	ug/L	95
42) Ethylbenzene	9.69	106	301280	24.81	ug/L	82
43) P+m-Xylene	9.77	106	735065	49.48	ug/L	99
44) O-Xylene	10.01	106	339145	24.71	ug/L	91
45) Styrene	10.02	104	524152	25.05	ug/L	94
46) Bromoform	10.15	173	39457	25.79	ug/L	# 100
47) Isopropylbenzene	10.23	105	901426	25.37	ug/L	98
48) 1,1,2,2-Tetrachloroethane	10.41	83	72197	21.30	ug/L	96
50) 1,2,3-Trichloropropane	10.45	110	18129	25.16	ug/L	# 18
51) n-propylbenzene	10.47	91	1106507	23.98	ug/L	93

(#) = qualifier out of range (m) = manual integration

28JUL63.D 82605.M Sat Jul 29 09:32:23 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL63.D Vial: 63
 Acq On : 29 Jul 2017 7:16 am Operator: MGC
 Sample : 1713324-CCV5 Inst : MS-V5
 Misc : 1 VO-109-70505;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 7:30 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	180481	24.79	ug/L	95
53) 1,3,5-trimethylbenzene	10.57	105	755606	25.70	ug/L	92
54) 2-chlorotoluene	10.54	91	726917	24.93	ug/L	100
55) 4-chlorotoluene	10.61	91	658127	25.00	ug/L	98
56) tert-butylbenzene	10.76	119	729783	25.12	ug/L	99
57) 1,2,4-trimethylbenzene	10.79	105	719374	24.70	ug/L	95
58) sec-butylbenzene	10.89	105	1028245	26.13	ug/L	98
59) 4-isopropyltoluene	10.96	119	819675	25.54	ug/L	97
60) 1,3-Dichlorobenzene	10.97	146	406910	26.11	ug/L	92
61) 1,4-Dichlorobenzene	11.03	146	391643	25.72	ug/L	94
62) n-butylbenzene	11.19	91	711417	23.79	ug/L	98
63) 1,2-Dichlorobenzene	11.24	146	342619	25.49	ug/L	96
64) Hexachloroethane	11.40	117	120649	22.46	ug/L #	72
65) 1,2-dibromo-3-chloropropan	11.67	75	10738	23.50	ug/L	95
66) 1,2,4-trichlorobenzene	12.11	180	187917	24.14	ug/L	99
67) hexachlorobutadiene	12.17	225	148321	27.52	ug/L #	89
68) naphthalene	12.26	128	221910	22.69	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	157678	24.13	ug/L #	90

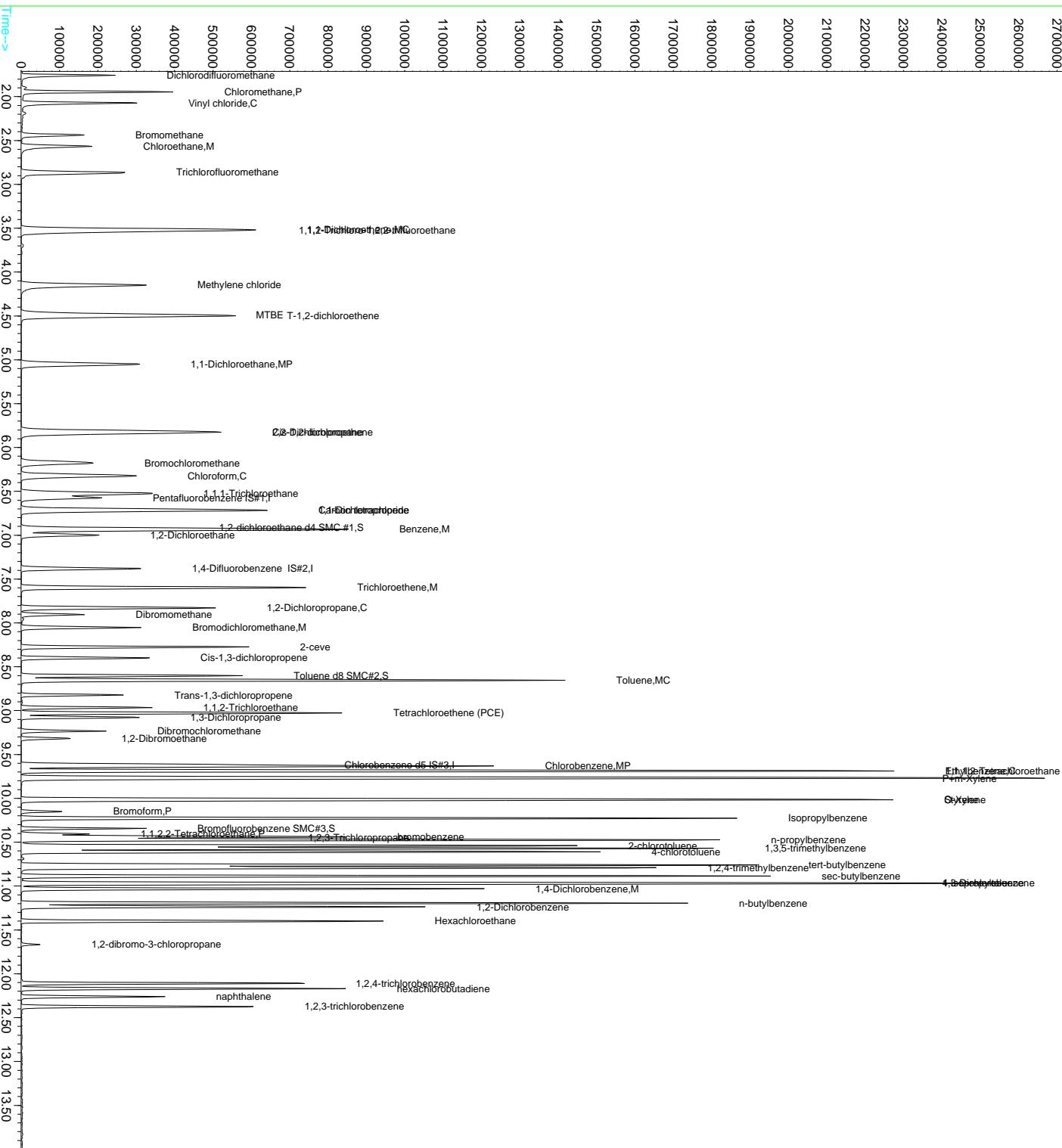
(#) = qualifier out of range (m) = manual integration
 28JUL63.D 82605.M Sat Jul 29 09:32:23 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL63.D Vial: 63
 Acq On : 29 Jul 2017 7:16 am Operator: MGC
 Sample : 1713324-CCV5 Inst : MS-V5
 Misc : 1 VO-109-70505;25ML Multipl: 1.00
 MS Integration Params: rteint.p

Quant Time: Jul 29 7:30 2017 Quant Results File: 82605.RES
 Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration

TIC: 28JUL63.D



28JUL63.D 82605.M Sat Jul 29 09:32:23 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL64.D Vial: 64
 Acq On : 29 Jul 2017 7:39 am Operator: MGC
 Sample : 1713324-CCV6 Inst : MS-V5
 Misc : 1 VO-109-70519;70520;70521;70522;70523;2 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 29 9:32 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)

Title : EPA Method 624/8260

Last Update : Fri Jul 21 04:19:15 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	162953	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	237313	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	64183	10.00	ug/L	0.00

Target Compounds

					Qvalue
2) ethanol	3.07	45	114072	3882.29	ug/L # 73
3) 2,2-Dichloro-1,1,1-trifluo	3.38	83	387756	25.09	ug/L # 89
4) 1,2-dichlorotrifluoroethan	3.29	67	264000	24.59	ug/L # 77
5) Diethyl ether	3.22	59	105316	25.85	ug/L 89
6) isopropyl alcohol	3.74	45	104319	770.22	ug/L # 73
7) Acrolein	3.39	56	61270	206.33	ug/L 84
8) acetone	3.55	43	210772	313.90	ug/L 97
9) tert-butyl alcohol (TBA)	4.27	59	144993	752.07	ug/L 100
10) acetonitrile	3.90	41	47743	149.30	ug/L 94
11) methyl acetate	3.96	43	507958	251.19	ug/L 92
12) allyl chloride	3.98	41	514975	31.50	ug/L 100
13) iodomethane	3.70	142	193319	20.12	ug/L 99
14) acrylonitrile	4.43	53	83714	75.62	ug/L 92
15) carbon disulfide	3.79	76	740235	29.96	ug/L 100
16) N-Hexane	4.85	57	273147	26.08	ug/L 89
17) diisopropyl ether	5.10	87	88557	14.54	ug/L 94
18) Vinyl acetate	5.05	43	1453306	152.81	ug/L 97
19) chloroprene	5.14	53	549390	31.98	ug/L 96
20) tert-butyl ethyl ether	5.58	59	288861	14.50	ug/L 97
21) 2-butanone (MEK)	5.79	43	174013	145.96	ug/L 86
22) propionitrile	5.88	54	150732	376.60	ug/L # 88
23) Isobutyl alcohol	6.83	43	40210	435.44	ug/L # 44
24) methacrylonitrile	6.11	67	157699	144.53	ug/L 96
25) Tert-amyl alcohol	6.96	59	385686	2468.19	ug/L 98
26) tetrahydrofuran	6.18	42	235811	294.71	ug/L 95
27) Cyclohexane	6.61	56	520383	24.40	ug/L # 75
28) tert-amyl methyl ether (TA	7.08	73	163487	14.91	ug/L 90
30) methyl methacrylate	7.87	69	134022	75.64	ug/L 83
31) Methylcyclohexane	7.81	55	393922	27.16	ug/L 95
32) 1,4-dioxane	7.89	88	39034	1809.12	ug/L 99
33) Methyl isobutyl ketone(mib	8.50	43	415583	156.52	ug/L 99
34) ethyl methacrylate	8.85	69	315229	77.77	ug/L 95
35) 2-hexanone	9.09	43	559741	311.20	ug/L 98
37) 5-Methyl-3-heptanone	10.43	43	162960	55.43	ug/L 84
38) cyclohexanone	10.29	55	173605	408.69	ug/L 97
39) t-1,4-dichloro-2-butene	10.43	75	52758	78.07	ug/L 69
40) Ethyl amyl ketone	10.75	57	63198	24.88	ug/L # 77
41) Pentachloroethane	10.79	167	54965	21.41	ug/L 99
42) benzyl chloride	11.09	91	141551	32.79	ug/L 98

(#= qualifier out of range (m) = manual integration

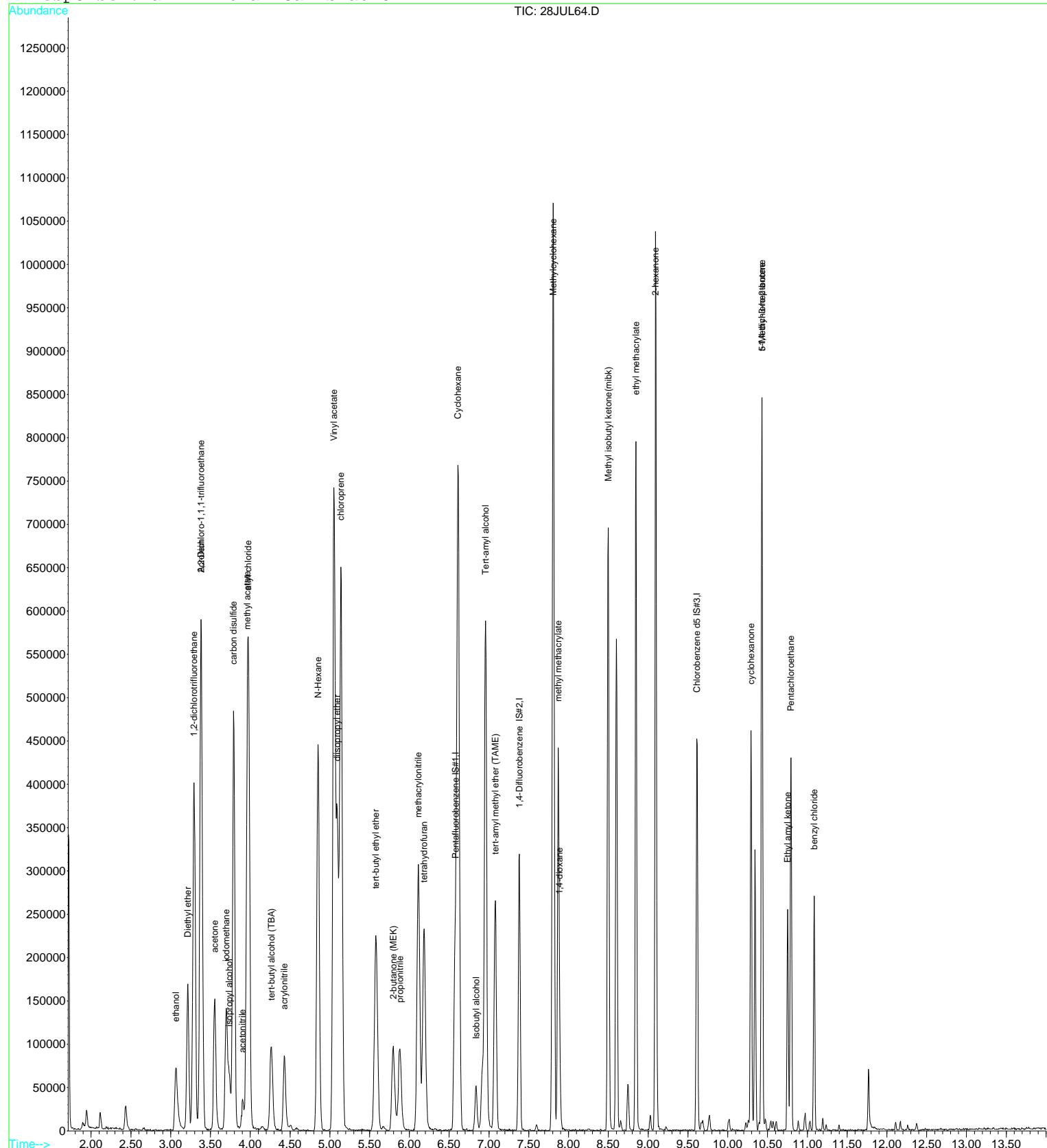
28JUL64.D 82605X.M Sat Jul 29 09:32:56 2017

Page 1

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL64.D Vial: 64
 Acq On : 29 Jul 2017 7:39 am Operator: MGC
 Sample : 1713324-CCV6 Inst : MS-V5
 Misc : 1 VO-109-70519;70520;70521;70522;70523;2 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:32 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL13.D Vial: 13
 Acq On : 29 Jul 2017 7:08 pm Operator: MGC
 Sample : 1713390-CCV3 Inst : MS-V5
 Misc : 1 VO-109-70505;25ML Multipllr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 19:22 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	180626	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	263149	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	72971	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	50775	9.62	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	96.20%
31) Toluene d8 SMC#2	8.60	98	326158	10.04	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	100.40%
49) Bromofluorobenzene SMC#3	10.34	95	106754	9.80	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.00%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	1.76	85	205174	22.83	ug/L
3) Chloromethane	1.95	50	362450	21.33	ug/L
4) Vinyl chloride	2.07	62	325076	24.02	ug/L #
5) Bromomethane	2.44	94	149499	20.36	ug/L #
6) Chloroethane	2.57	64	215171	23.15	ug/L
7) Trichlorofluoromethane	2.87	101	291894	26.24	ug/L
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	190877	24.99	ug/L #
9) 1,1-Dichloroethene	3.51	61	358017	24.56	ug/L
10) Methylene chloride	4.15	84	181190	23.25	ug/L
11) MTBE	4.48	73	254699	23.35	ug/L #
12) T-1,2-dichloroethene	4.50	96	216800	23.96	ug/L
13) 1,1-Dichloroethane	5.05	63	471608	24.40	ug/L
14) 2,2-Dichloropropane	5.83	77	269254	24.75	ug/L
15) Cis-1,2-dichloroethene	5.82	96	222183	23.56	ug/L
16) Bromochloromethane	6.17	128	73200	24.35	ug/L #
17) Chloroform	6.32	83	329219	24.07	ug/L
18) 1,1,1-Trichloroethane	6.53	97	308368	26.05	ug/L #
19) 1,1-Dichloropropene	6.72	75	300779	24.32	ug/L
20) Carbon tetrachloride	6.71	119	215165	26.51	ug/L
22) 1,2-Dichloroethane	7.00	62	188520	25.66	ug/L #
23) Benzene	6.93	78	869474	23.51	ug/L #
25) Trichloroethene	7.60	130	245179	27.13	ug/L
26) 1,2-Dichloropropane	7.83	63	244486	24.49	ug/L
27) Dibromomethane	7.90	93	67148	26.65	ug/L
28) Bromodichloromethane	8.05	83	199862	26.38	ug/L
29) 2-ceve	8.27	63	248327	96.31	ug/L #
30) Cis-1,3-dichloropropene	8.40	75	250672	26.50	ug/L
32) Toluene	8.65	92	586878	25.74	ug/L
33) Trans-1,3-dichloropropene	8.82	75	170109	27.55	ug/L #
34) 1,1,2-Trichloroethane	8.97	97	103929	25.37	ug/L
35) Tetrachloroethene (PCE)	9.03	166	232084	26.80	ug/L
36) 1,3-Dichloropropane	9.08	76	162627	24.44	ug/L
37) Dibromochloromethane	9.23	129	110093	27.81	ug/L #
38) 1,2-Dibromoethane	9.32	107	87836	25.80	ug/L
40) Chlorobenzene	9.63	112	595428	24.61	ug/L
41) 1,1,1,2-Tetrachloroethane	9.69	131	162946	27.36	ug/L
42) Ethylbenzene	9.69	106	355252	24.99	ug/L
43) P+m-Xylene	9.77	106	865020	49.74	ug/L
44) O-Xylene	10.01	106	403063	25.08	ug/L
45) Styrene	10.02	104	627272	25.61	ug/L
46) Bromoform	10.15	173	49622	27.70	ug/L #
47) Isopropylbenzene	10.23	105	1071253	25.75	ug/L
48) 1,1,2,2-Tetrachloroethane	10.40	83	98152	24.74	ug/L
50) 1,2,3-Trichloropropane	10.45	110	23142	27.43	ug/L #
51) n-propylbenzene	10.48	91	1303192	24.12	ug/L

(#) = qualifier out of range (m) = manual integration

29JUL13.D 82605.M Sun Jul 30 05:27:08 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL13.D Vial: 13
 Acq On : 29 Jul 2017 7:08 pm Operator: MGC
 Sample : 1713390-CCV3 Inst : MS-V5
 Misc : 1 VO-109-70505;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 19:22 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

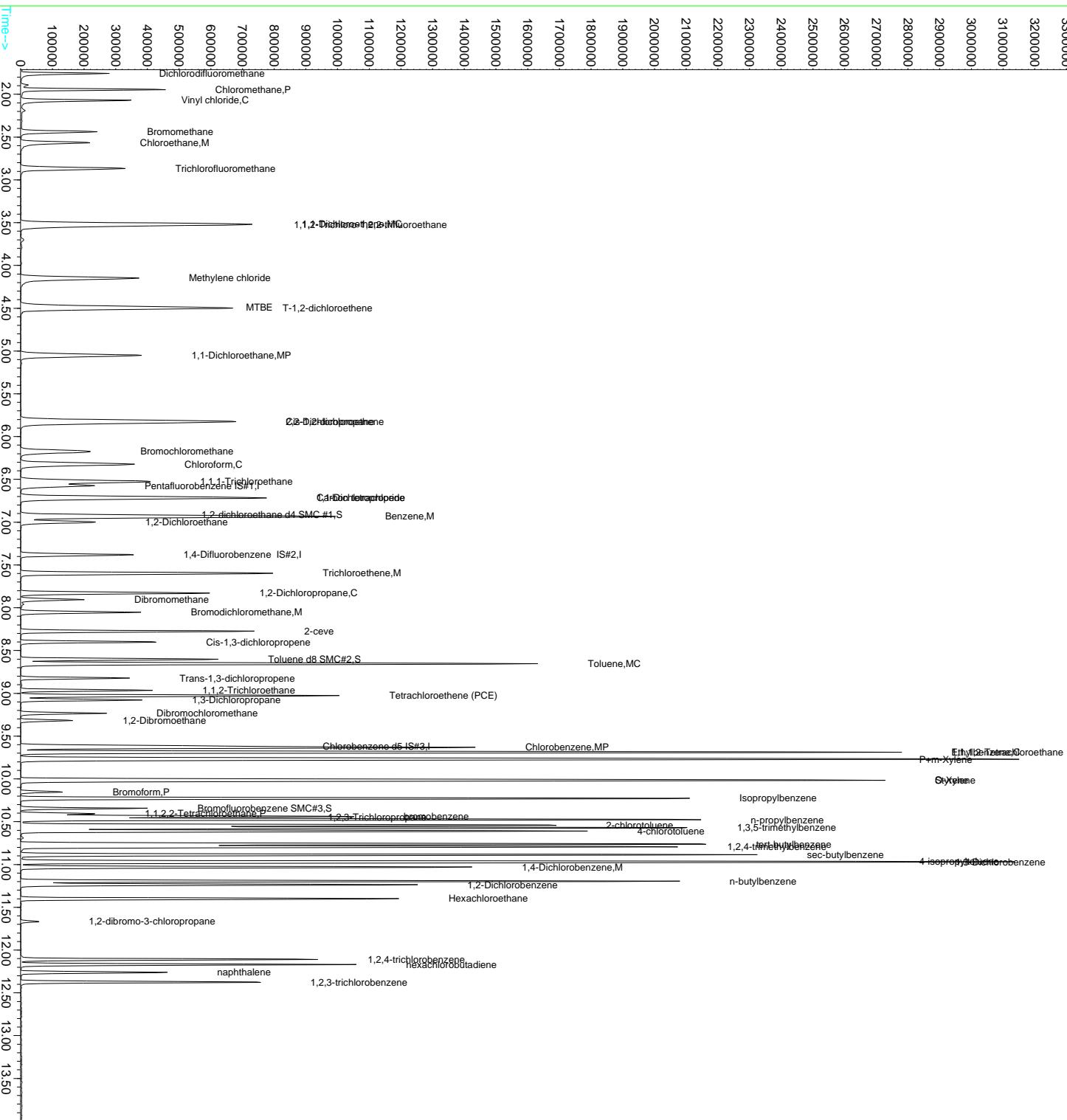
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	218267	25.61	ug/L	95
53) 1,3,5-trimethylbenzene	10.57	105	907253	26.35	ug/L	93
54) 2-chlorotoluene	10.54	91	867524	25.42	ug/L	99
55) 4-chlorotoluene	10.61	91	790953	25.66	ug/L	98
56) tert-butylbenzene	10.76	119	861165	25.32	ug/L	97
57) 1,2,4-trimethylbenzene	10.79	105	861936	25.28	ug/L	93
58) sec-butylbenzene	10.89	105	1218311	26.44	ug/L	98
59) 4-isopropyltoluene	10.96	119	981815	26.13	ug/L	96
60) 1,3-Dichlorobenzene	10.98	146	489592	26.84	ug/L	93
61) 1,4-Dichlorobenzene	11.03	146	477259	26.77	ug/L	94
62) n-butylbenzene	11.19	91	876318	25.03	ug/L	98
63) 1,2-Dichlorobenzene	11.23	146	418288	26.58	ug/L	95
64) Hexachloroethane	11.40	117	154295	24.37	ug/L #	70
65) 1,2-dibromo-3-chloropropan	11.67	75	13611	25.45	ug/L	95
66) 1,2,4-trichlorobenzene	12.11	180	237551	26.06	ug/L	98
67) hexachlorobutadiene	12.17	225	176486	27.97	ug/L #	86
68) naphthalene	12.26	128	282340	24.66	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	201798	26.38	ug/L #	93

(#) = qualifier out of range (m) = manual integration
 29JUL13.D 82605.M Sun Jul 30 05:27:08 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL13.D Vial: 13
 Acq On : 29 Jul 2017 7:08 pm Operator: MGC
 Sample : 1713390-CCV3 Inst : MS-V5
 Misc : 1 VO-109-70505;25ML Multipl: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 19:22 2017 Quant Results File: 82605.RES
 Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration

Abundance



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL14.D Vial: 14
 Acq On : 29 Jul 2017 7:31 pm Operator: MGC
 Sample : 1713390-CCV4 Inst : MS-V5
 Misc : 1 VO-109-70519;70520;70521;70522;70523;2 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 30 5:27 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)

Title : EPA Method 624/8260

Last Update : Fri Jul 21 04:19:15 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	158448	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	236027	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	62675	10.00	ug/L	0.00

Target Compounds

					Qvalue
2) ethanol	3.07	45	139518	4883.32	ug/L # 76
3) 2,2-Dichloro-1,1,1-trifluo	3.38	83	406178	27.03	ug/L # 88
4) 1,2-dichlorotrifluoroethan	3.29	67	272862	26.14	ug/L # 75
5) Diethyl ether	3.22	59	119782	30.23	ug/L 90
6) isopropyl alcohol	3.74	45	129770	985.38	ug/L # 1
7) Acrolein	3.39	56	88434	306.27	ug/L 89
8) acetone	3.55	43	242532	371.47	ug/L 97
9) tert-butyl alcohol (TBA)	4.27	59	173930	927.82	ug/L 100
10) acetonitrile	3.90	41	56184	180.69	ug/L 97
11) methyl acetate	3.96	43	585203	297.62	ug/L 93
12) allyl chloride	3.98	41	524705	33.01	ug/L 99
13) iodomethane	3.70	142	176349	18.88	ug/L 97
14) acrylonitrile	4.43	53	94269	87.57	ug/L 91
15) carbon disulfide	3.79	76	750849	31.26	ug/L 100
16) N-Hexane	4.85	57	265351	26.05	ug/L 87
17) diisopropyl ether	5.09	87	93107	15.72	ug/L 96
18) Vinyl acetate	5.05	43	1348184	145.78	ug/L 99
19) chloroprene	5.14	53	559515	33.49	ug/L 96
20) tert-butyl ethyl ether	5.58	59	328806	16.97	ug/L 100
21) 2-butanone (MEK)	5.79	43	205300	177.10	ug/L 88
22) propionitrile	5.88	54	173579	446.01	ug/L # 89
23) Isobutyl alcohol	6.83	43	48419	539.24	ug/L # 43
24) methacrylonitrile	6.11	67	178839	168.57	ug/L 93
25) Tert-amyl alcohol	6.96	59	473539	3116.57	ug/L 98
26) tetrahydrofuran	6.19	42	262917	337.93	ug/L 92
27) Cyclohexane	6.61	56	539654	26.02	ug/L # 75
28) tert-amyl methyl ether (TA	7.08	73	184277	17.29	ug/L 91
30) methyl methacrylate	7.87	69	159548	90.54	ug/L 91
31) Methylcyclohexane	7.81	55	404883	28.07	ug/L 95
32) 1,4-dioxane	7.89	88	49049	2285.68	ug/L 94
33) Methyl isobutyl ketone(mib	8.50	43	484718	183.55	ug/L 100
34) ethyl methacrylate	8.85	69	358716	88.98	ug/L 95
35) 2-hexanone	9.09	43	654091	365.64	ug/L 98
37) 5-Methyl-3-heptanone	10.43	43	182834	63.69	ug/L 87
38) cyclohexanone	10.29	55	227581	548.65	ug/L 96
39) t-1,4-dichloro-2-butene	10.43	75	66555	100.86	ug/L # 62
40) Ethyl amyl ketone	10.75	57	74751	30.13	ug/L # 76
41) Pentachloroethane	10.80	167	16302	6.50	ug/L 95
42) benzyl chloride	11.09	91	137109	32.55	ug/L 98

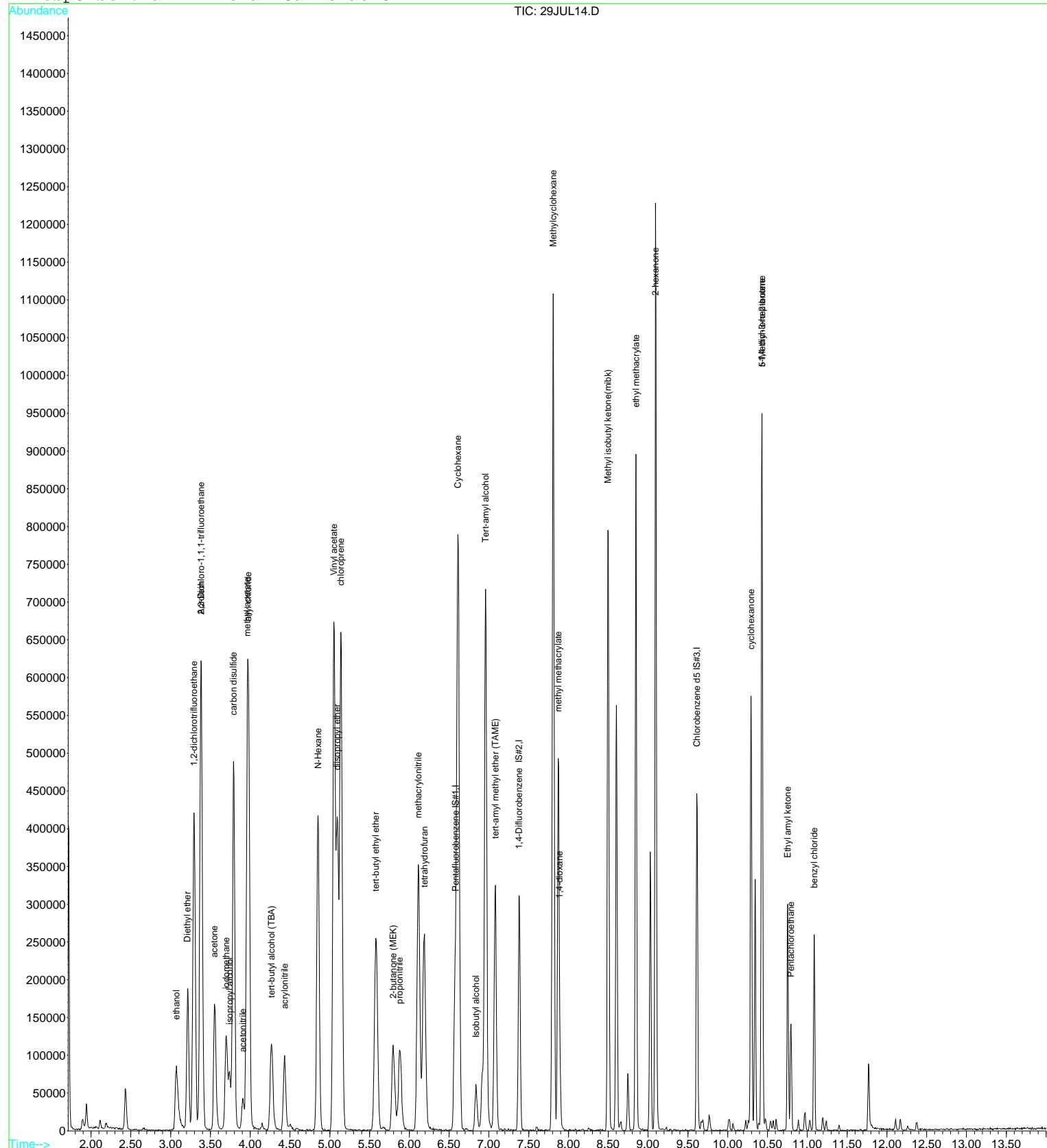
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29JUL14.D 82605X.M Sun Jul 30 05:27:53 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL14.D Vial: 14
 Acq On : 29 Jul 2017 7:31 pm Operator: MGC
 Sample : 1713390-CCV4 Inst : MS-V5
 Misc : 1 VO-109-70519;70520;70521;70522;70523;2 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:27 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration





Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - CCB

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL35.D Vial: 35
 Acq On : 28 Jul 2017 8:32 pm Operator: MGC
 Sample : 1713324-CCB2 Inst : MS-V5
 Misc : 1 CCB2;25ML Multipllr: 1.00

MS Integration Params: rteint.p
 Quant Time: Jul 29 8:38 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	174164	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	256996	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	67477	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	49558	9.74	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	97.40%
31) Toluene d8 SMC#2	8.60	98	306553	9.66	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.60%
49) Bromofluorobenzene SMC#3	10.34	95	99819	9.91	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.10%

Target Compounds	Qvalue
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(#) = qualifier out of range (m) = manual integration

28JUL35.D 82605.M Sat Jul 29 08:38:07 2017

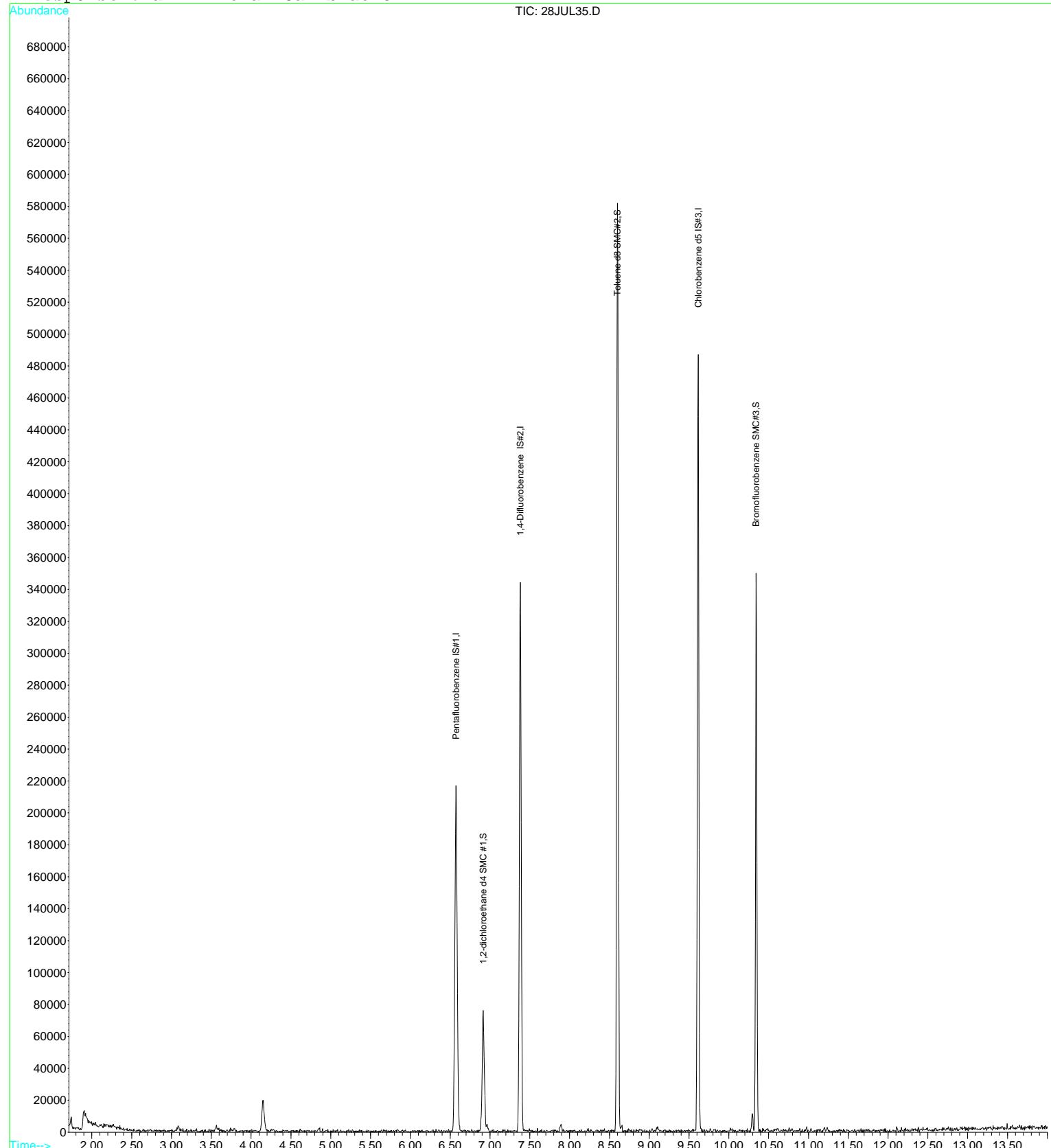
Page 1

BC Laboratories, Inc, Page 540 of 925

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL35.D Vial: 35
 Acq On : 28 Jul 2017 8:32 pm Operator: MGC
 Sample : 1713324-CCB2 Inst : MS-V5
 Misc : 1 CCB2;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 8:38 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL35.D Vial: 35
Acq On : 28 Jul 2017 8:32 pm Operator: MGC
Sample : 1713324-CCB2 Inst : MS-V5
Misc : 1 CCB2;25ML Multiplr: 1.00

MS Integration Params: rteint.p
Quant Time: Jul 29 8:38 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration
DataAcq Meth : 82605

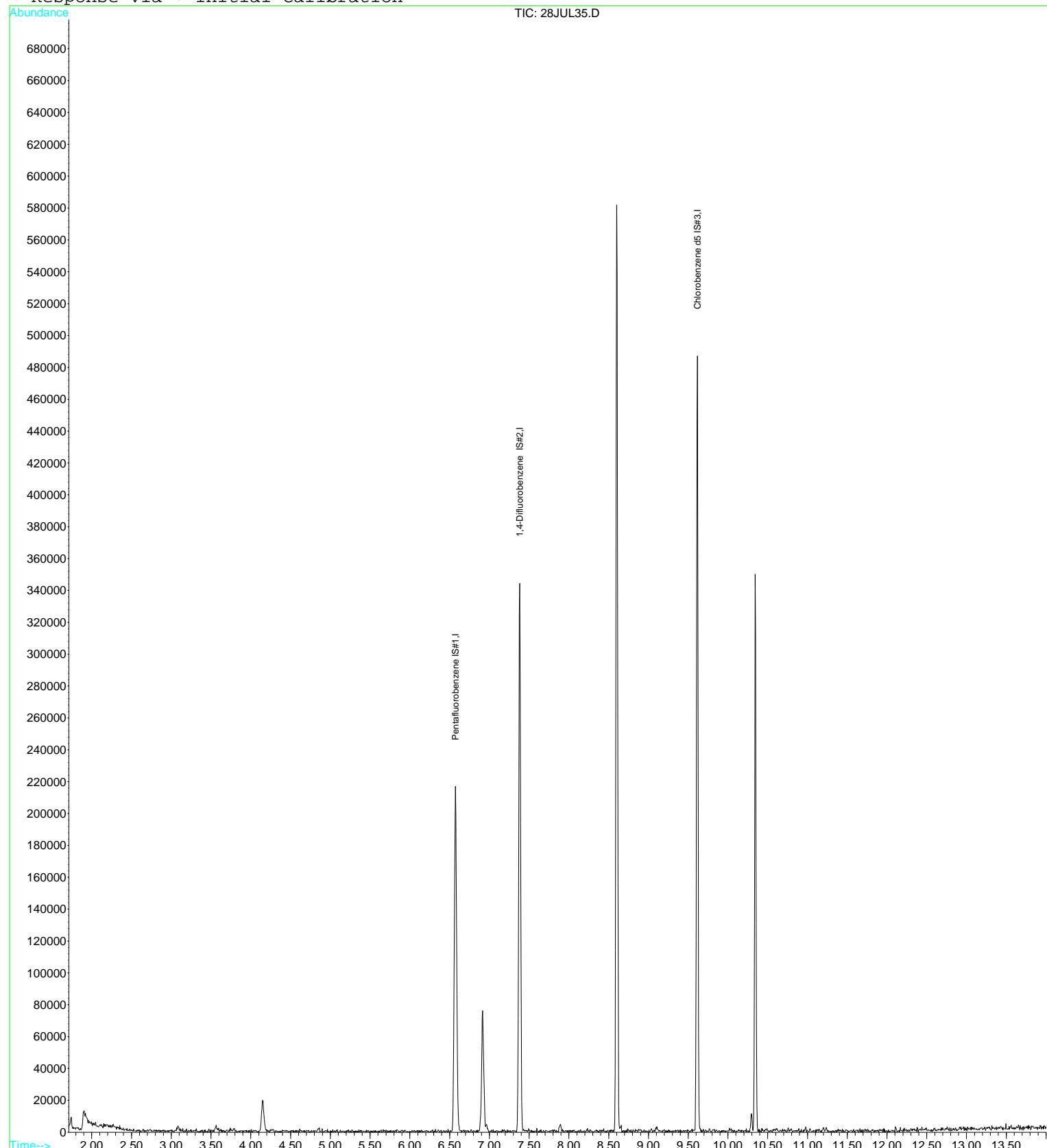
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----	-----	-----	-----	-----	-----	-----
1) Pentafluorobenzene IS#1	6.57	168	174164	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	256996	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	67477	10.00	ug/L	0.00

Target Compounds	Qvalue
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Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL35.D Vial: 35
Acq On : 28 Jul 2017 8:32 pm Operator: MGC
Sample : 1713324-CCB2 Inst : MS-V5
Misc : 1 CCB2;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 8:38 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL65.D Vial: 65
 Acq On : 29 Jul 2017 8:02 am Operator: MGC
 Sample : 1713324-CCB3 Inst : MS-V5
 Misc : 1 CCB3;25ML Multipllr: 1.00

MS Integration Params: rteint.p
 Quant Time: Jul 29 9:33 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	155536	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	236490	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	64189	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	47749	10.51	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	105.10%
31) Toluene d8 SMC#2	8.60	98	285370	9.77	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.70%
49) Bromofluorobenzene SMC#3	10.34	95	87247	9.10	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	91.00%

Target Compounds	Qvalue
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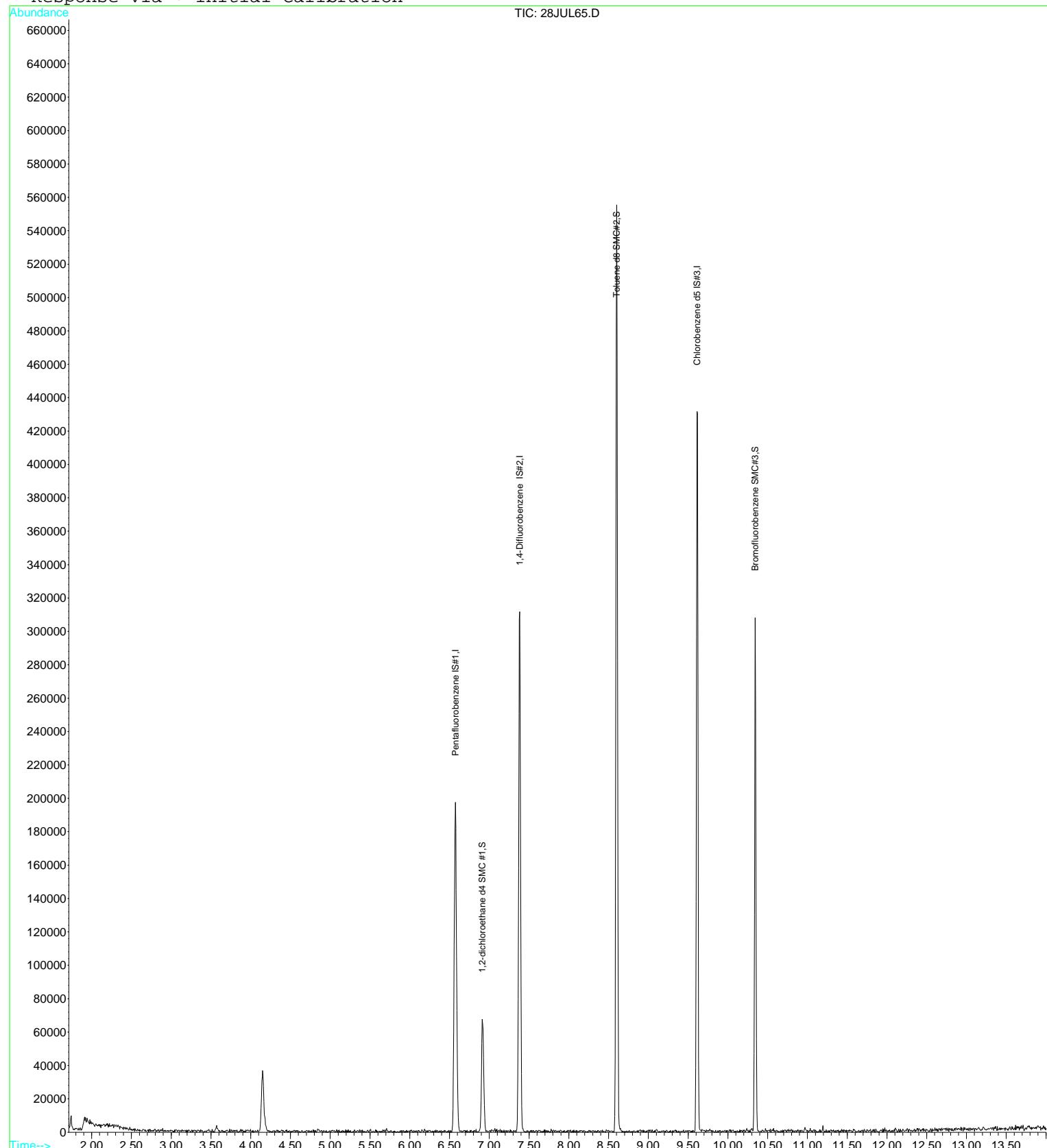
(#) = qualifier out of range (m) = manual integration

28JUL65.D 82605.M Sat Jul 29 09:33:16 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL65.D Vial: 65
Acq On : 29 Jul 2017 8:02 am Operator: MGC
Sample : 1713324-CCB3 Inst : MS-V5
Misc : 1 CCB3;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:33 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL65.D Vial: 65
Acq On : 29 Jul 2017 8:02 am Operator: MGC
Sample : 1713324-CCB3 Inst : MS-V5
Misc : 1 CCB3;25ML Multiplr: 1.00

MS Integration Params: rteint.p
Quant Time: Jul 29 9:33 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration
DataAcq Meth : 82605

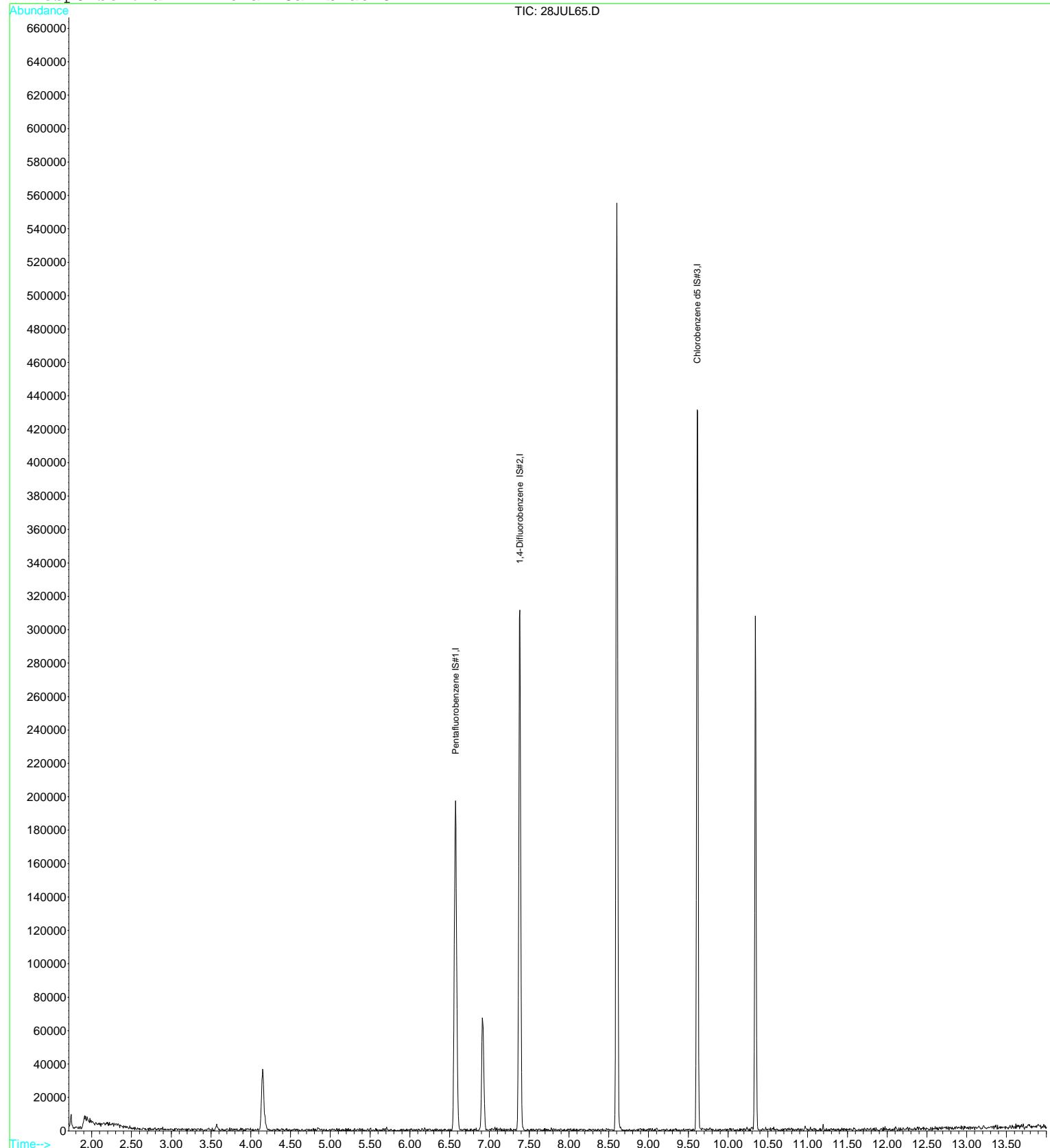
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----	-----	-----	-----	-----	-----	-----
1) Pentafluorobenzene IS#1	6.57	168	155536	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	236490	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	64189	10.00	ug/L	0.00

Target Compounds	Qvalue
-----	-----

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL65.D Vial: 65
Acq On : 29 Jul 2017 8:02 am Operator: MGC
Sample : 1713324-CCB3 Inst : MS-V5
Misc : 1 CCB3;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:33 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL15.D Vial: 15
 Acq On : 29 Jul 2017 7:54 pm Operator: MGC
 Sample : 1713390-CCB2 Inst : MS-V5
 Misc : 1 CCB2;25ML Multipllr: 1.00

MS Integration Params: rteint.p
 Quant Time: Jul 30 5:29 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	188729	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	271364	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	71584	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	54812	9.94	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	99.40%
31) Toluene d8 SMC#2	8.60	98	327938	9.79	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.90%
49) Bromofluorobenzene SMC#3	10.34	95	106701	9.98	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.80%

Target Compounds	Qvalue
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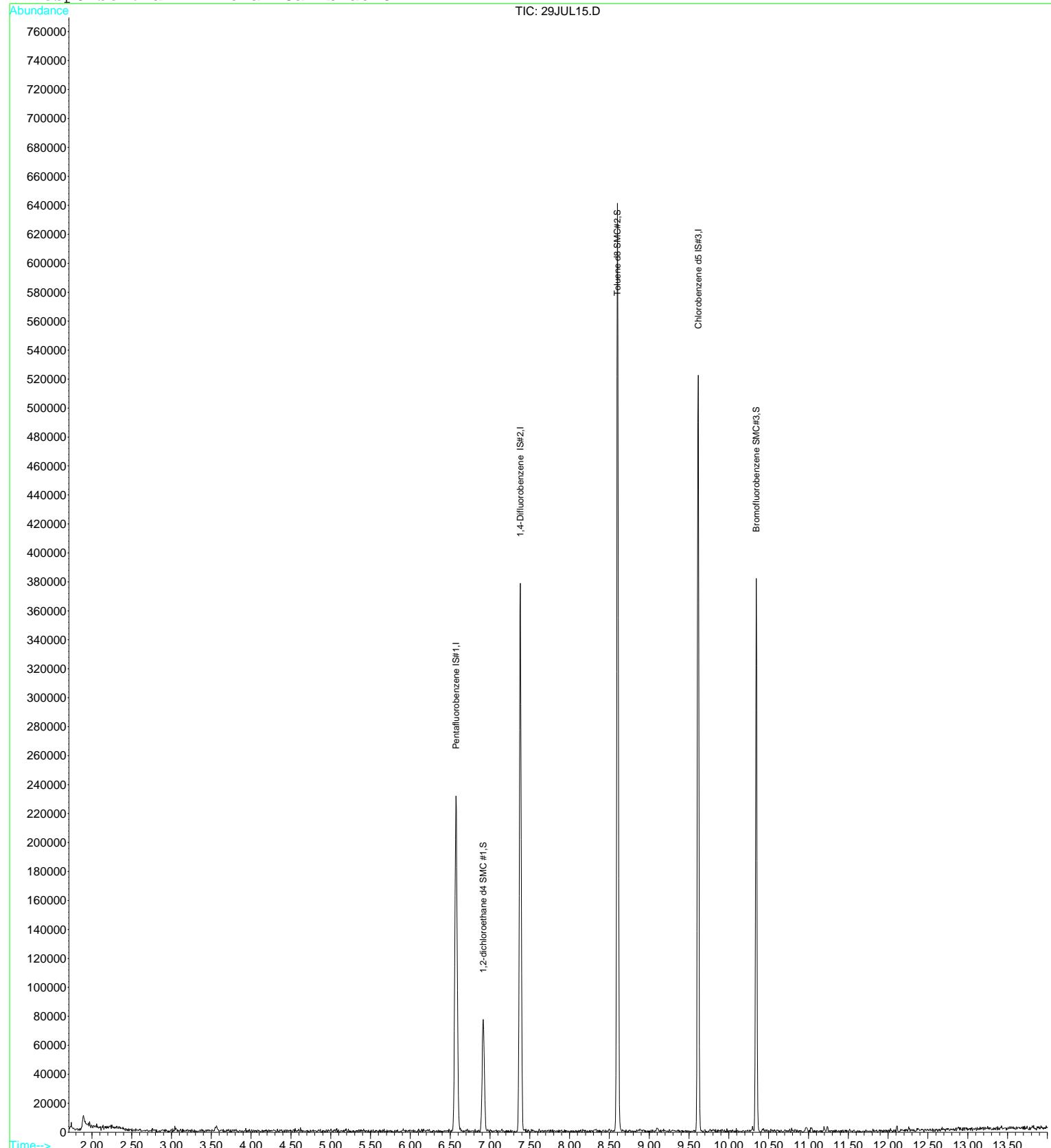
(#) = qualifier out of range (m) = manual integration

29JUL15.D 82605.M Sun Jul 30 05:29:24 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL15.D Vial: 15
Acq On : 29 Jul 2017 7:54 pm Operator: MGC
Sample : 1713390-CCB2 Inst : MS-V5
Misc : 1 CCB2;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 30 5:29 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL15.D Vial: 15
Acq On : 29 Jul 2017 7:54 pm Operator: MGC
Sample : 1713390-CCB2 Inst : MS-V5
Misc : 1 CCB2;25ML Multiplr: 1.00

MS Integration Params: rteint.p
Quant Time: Jul 30 5:29 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)

Title : EPA Method 624/8260

Last Update : Fri Jul 21 04:19:15 2017

Response via : Initial Calibration

DataAcq Meth : 82605

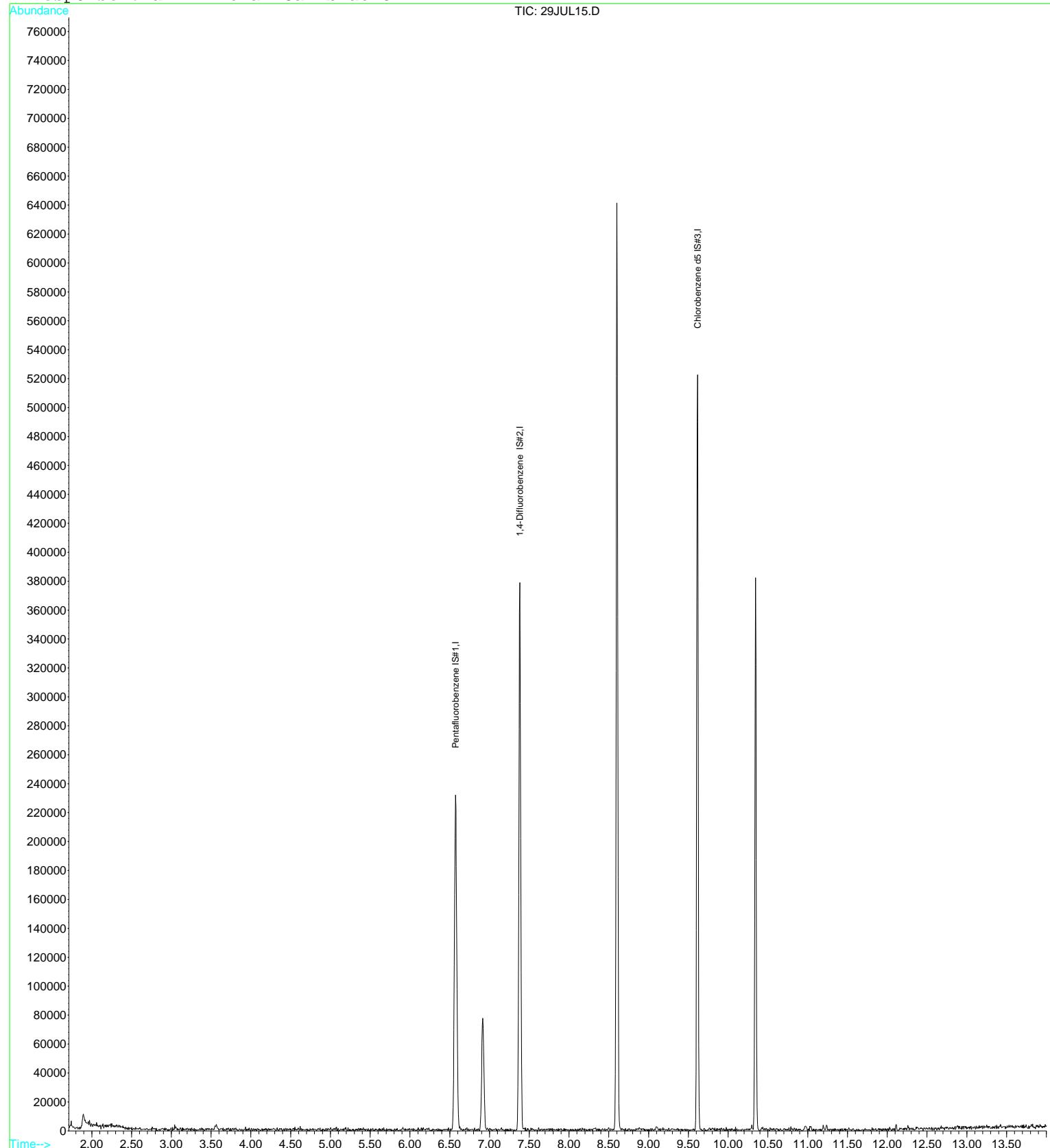
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----	-----	-----	-----	-----	-----	-----
1) Pentafluorobenzene IS#1	6.57	168	188729	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	271364	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	71584	10.00	ug/L	0.00

Target Compounds	Qvalue
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Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL15.D Vial: 15
Acq On : 29 Jul 2017 7:54 pm Operator: MGC
Sample : 1713390-CCB2 Inst : MS-V5
Misc : 1 CCB2;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 30 5:29 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration





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Raw Data - Tune

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL02.D Vial: 2
 Acq On : 20 Jul 2017 8:09 am Operator: MGC
 Sample : 1712752-TUN1 Inst : MS-V5
 Misc : 1 VO-108-70267;50NG Multipllr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 20 14:23 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	52073	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	84177	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	24018	10.00	ug/L	0.00

System Monitoring Compounds

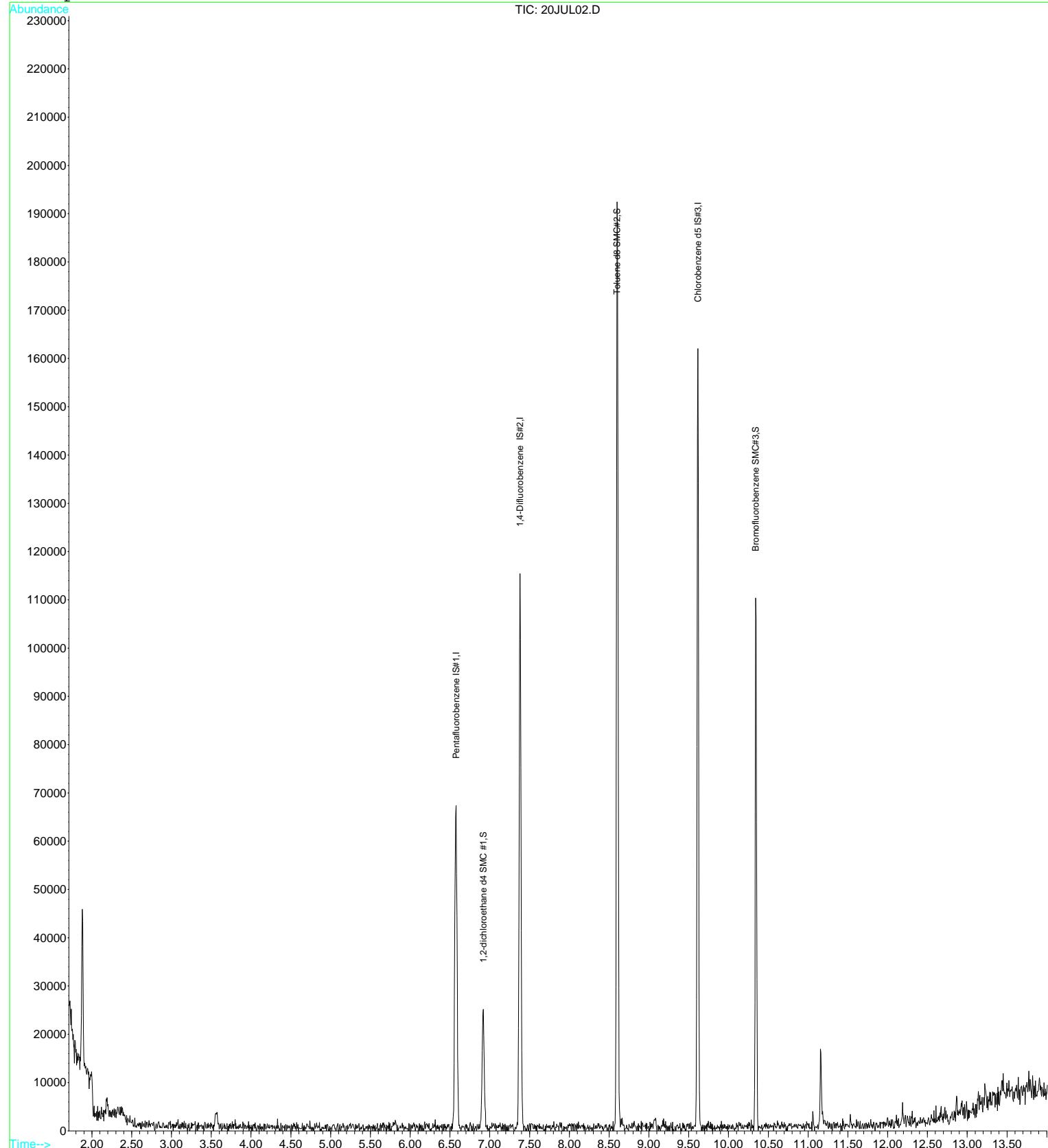
21) 1,2-dichloroethane d4 SMC	6.92	65	15808	10.14	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	101.40%
31) Toluene d8 SMC#2	8.60	98	102649	9.85	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.50%
49) Bromofluorobenzene SMC#3	10.34	95	29842	8.39	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	83.90%

Target Compounds	Qvalue
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Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL20\20JUL02.D Vial: 2
Acq On : 20 Jul 2017 8:09 am Operator: MGC
Sample : 1712752-TUN1 Inst : MS-V5
Misc : 1 VO-108-70267;50NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 20 14:23 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL49.D Vial: 49
 Acq On : 17 Jul 2017 11:37 pm Operator: MGC
 Sample : 1712538-TUN1 Inst : MS-V5
 Misc : 1 VO-108-70267;50NG Multipllr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 18 7:07 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Wed Jul 12 08:31:09 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	46206	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	85071	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	22393	10.00	ug/L	0.00

System Monitoring Compounds

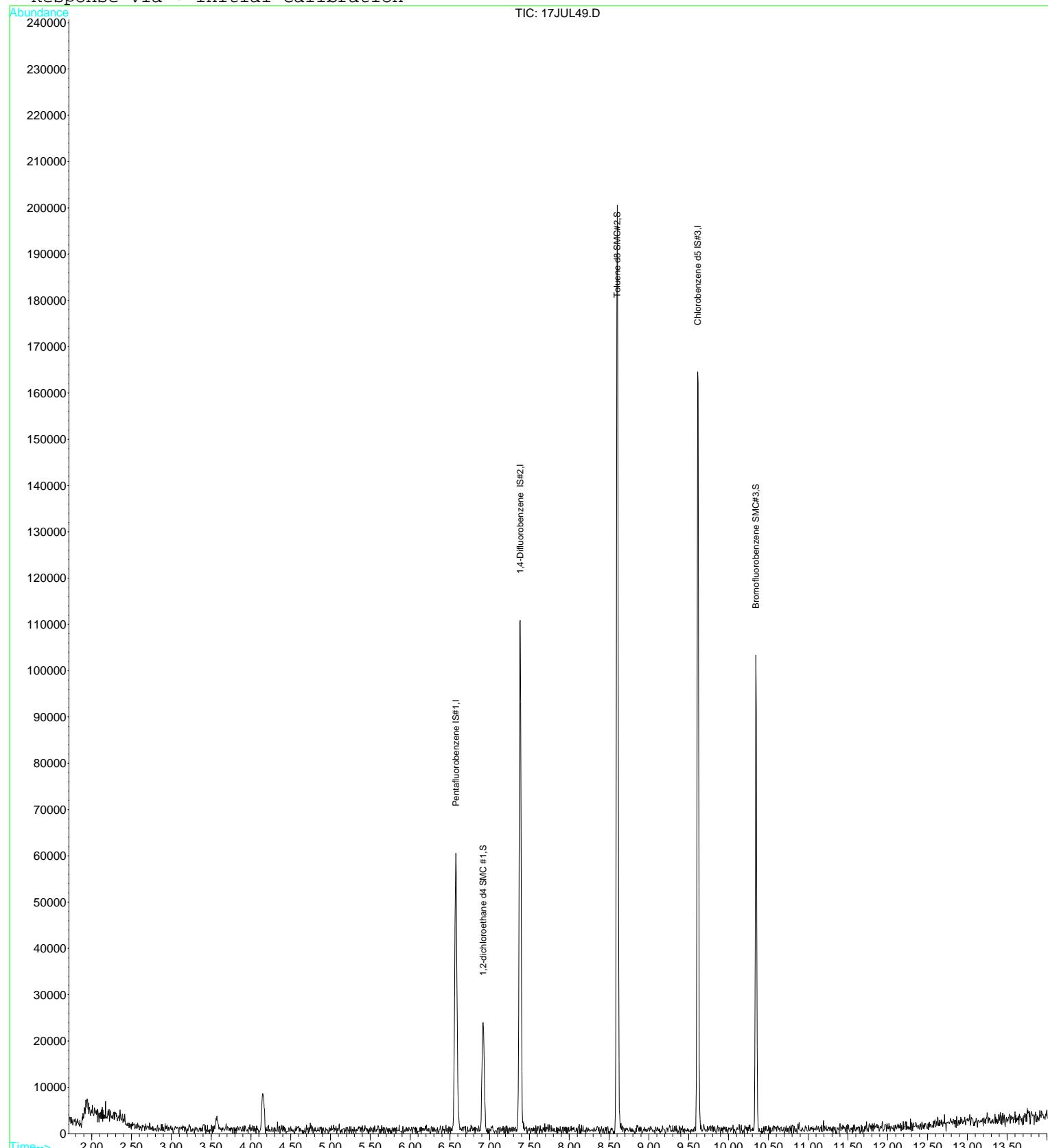
21) 1,2-dichloroethane d4 SMC	6.91	65	17323	12.52	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	125.20%#
31) Toluene d8 SMC#2	8.60	98	103755	9.86	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.60%
49) Bromofluorobenzene SMC#3	10.35	95	31164	9.40	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	94.00%

Target Compounds	Qvalue
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Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL17\17JUL49.D Vial: 49
Acq On : 17 Jul 2017 11:37 pm Operator: MGC
Sample : 1712538-TUN1 Inst : MS-V5
Misc : 1 VO-108-70267;50NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 18 7:07 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\11-0727\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Wed Jul 12 08:31:09 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL32.D Vial: 32
 Acq On : 28 Jul 2017 7:23 pm Operator: MGC
 Sample : 1713324-TUN2 Inst : MS-V5
 Misc : 1 VO-108-70267;50NG Multipllr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 8:36 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	38801	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	73516	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	19631	10.00	ug/L	0.00

System Monitoring Compounds

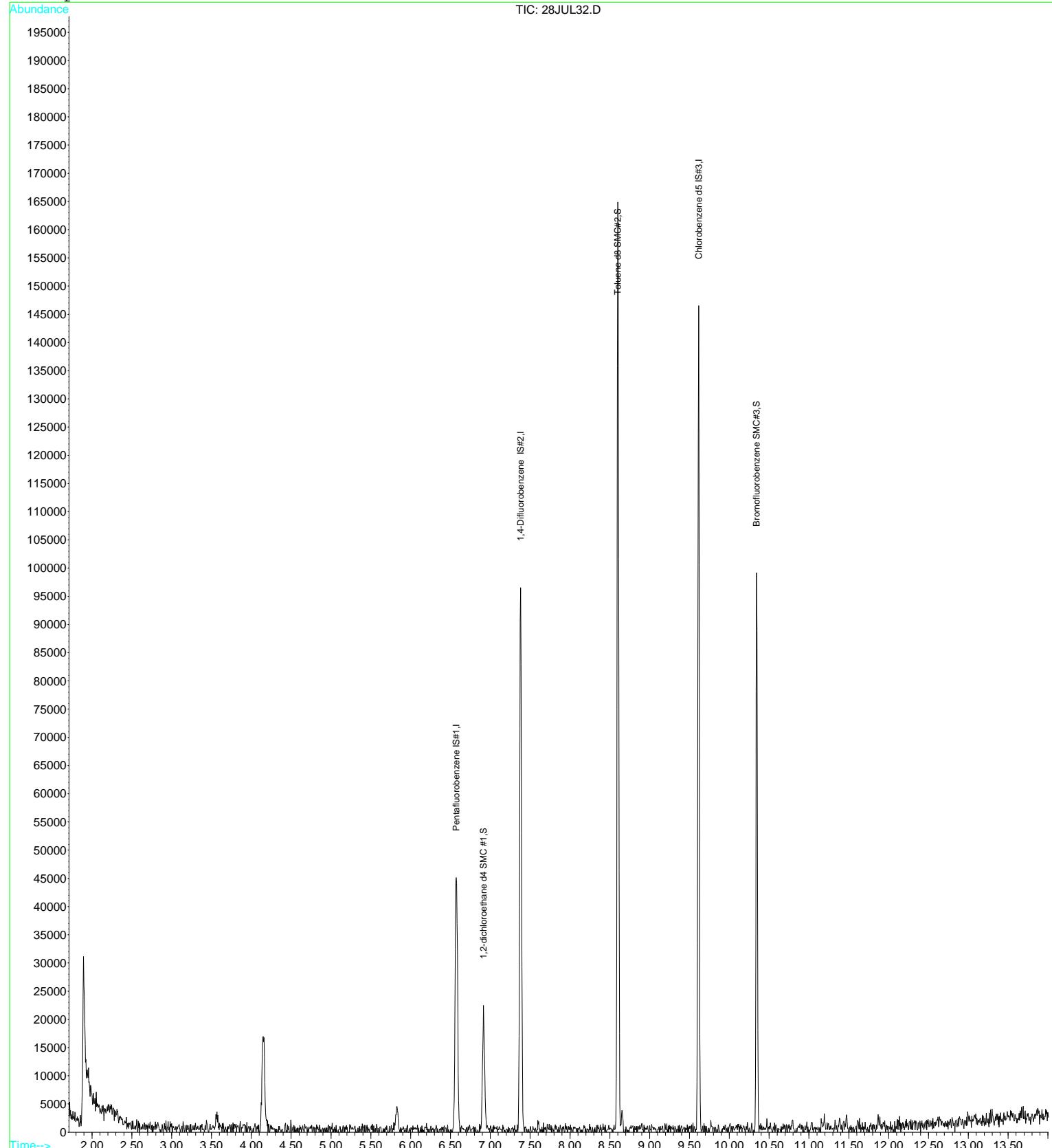
21) 1,2-dichloroethane d4 SMC	6.92	65	14989	13.23	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	132.30%#
31) Toluene d8 SMC#2	8.60	98	87400	9.63	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.30%
49) Bromofluorobenzene SMC#3	10.34	95	28766	9.81	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.10%

Target Compounds	Qvalue
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Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL32.D Vial: 32
 Acq On : 28 Jul 2017 7:23 pm Operator: MGC
 Sample : 1713324-TUN2 Inst : MS-V5
 Misc : 1 VO-108-70267;50NG Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 8:36 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL62.D Vial: 62
 Acq On : 29 Jul 2017 6:53 am Operator: MGC
 Sample : 1713324-TUN3 Inst : MS-V5
 Misc : 1 VO-108-70267;50NG Multipllr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:31 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	31410	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	57014	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	16085	10.00	ug/L	0.00

System Monitoring Compounds

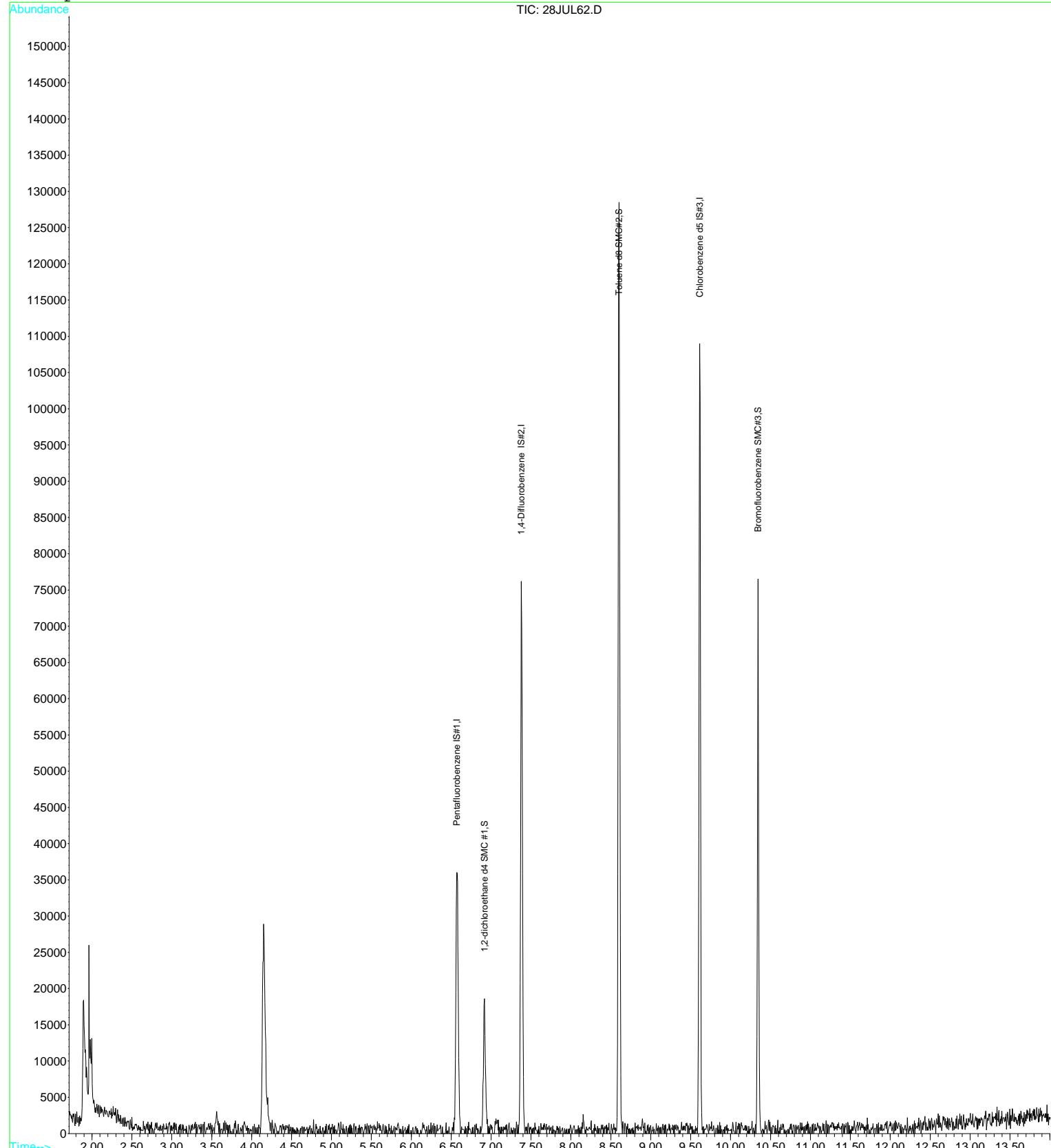
21) 1,2-dichloroethane d4 SMC	6.92	65	12307	13.42	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	134.20%#
31) Toluene d8 SMC#2	8.60	98	68018	9.66	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	96.60%
49) Bromofluorobenzene SMC#3	10.35	95	21026	8.75	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	87.50%

Target Compounds	Qvalue
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Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL62.D Vial: 62
Acq On : 29 Jul 2017 6:53 am Operator: MGC
Sample : 1713324-TUN3 Inst : MS-V5
Misc : 1 VO-108-70267;50NG Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:31 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
Title : EPA Method 624/524.2/8260
Last Update : Thu Jul 20 11:28:22 2017
Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL12.D Vial: 12
 Acq On : 29 Jul 2017 6:45 pm Operator: MGC
 Sample : 1713390-TUN2 Inst : MS-V5
 Misc : 1 VO-108-70267;50NG Multipllr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:25 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	42024	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	70241	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	20433	10.00	ug/L	0.00

System Monitoring Compounds

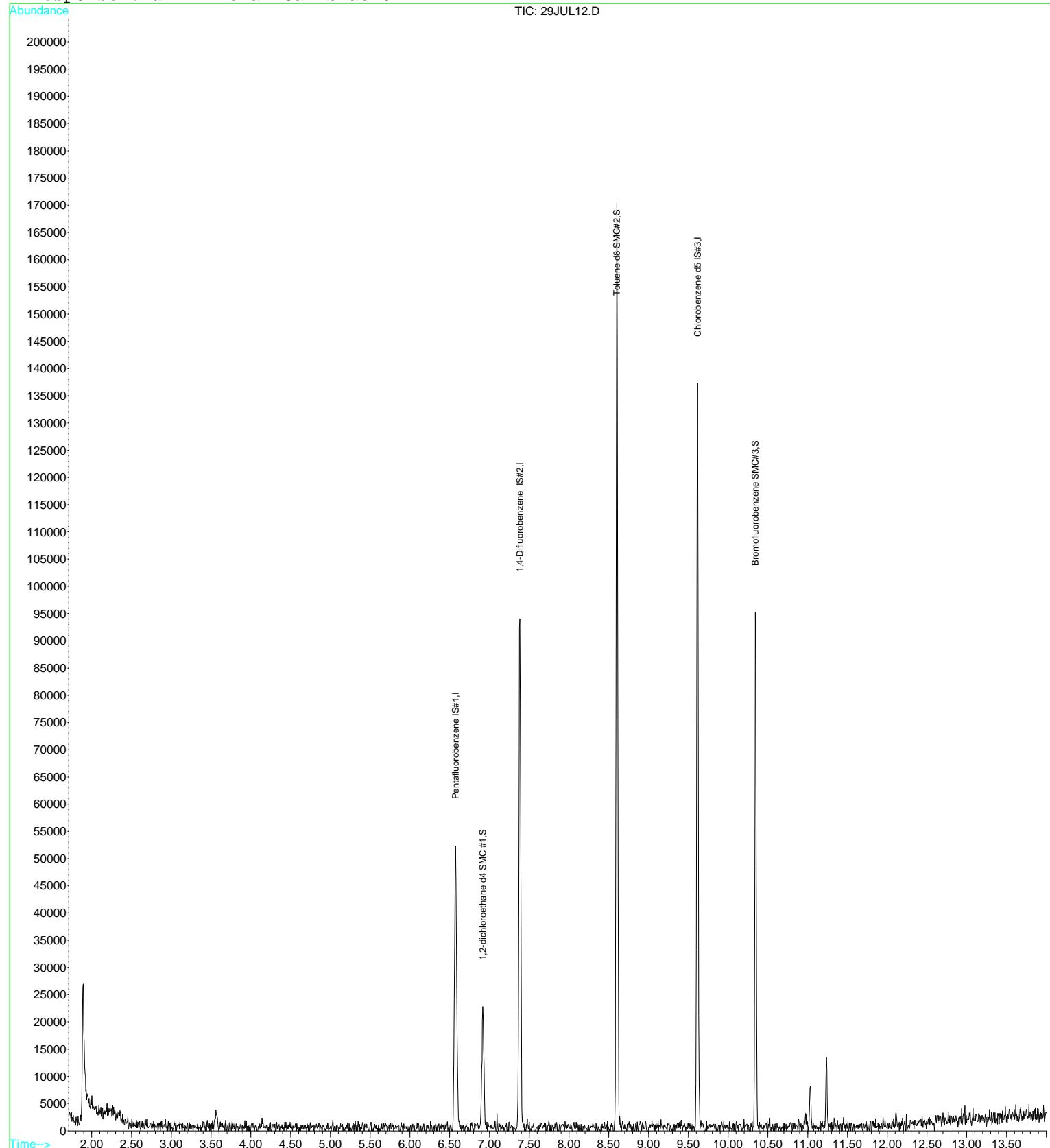
21) 1,2-dichloroethane d4 SMC	6.92	65	15139	12.33	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	123.30%
31) Toluene d8 SMC#2	8.60	98	85246	9.83	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.30%
49) Bromofluorobenzene SMC#3	10.34	95	26911	8.82	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	88.20%

Target Compounds	Qvalue
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Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL29\29JUL12.D Vial: 12
 Acq On : 29 Jul 2017 6:45 pm Operator: MGC
 Sample : 1713390-TUN2 Inst : MS-V5
 Misc : 1 VO-108-70267;50NG Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 30 5:25 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration





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Raw Data - Method Blank

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL66.D Vial: 66
 Acq On : 29 Jul 2017 8:25 am Operator: MGC
 Sample : B[G2380-BLK1] Inst : MS-V5
 Misc : 1 PB1;VRL-15-5710;25ML Multipllr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:39 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	159258	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	237571	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	60434	10.00	ug/L	0.00

System Monitoring Compounds

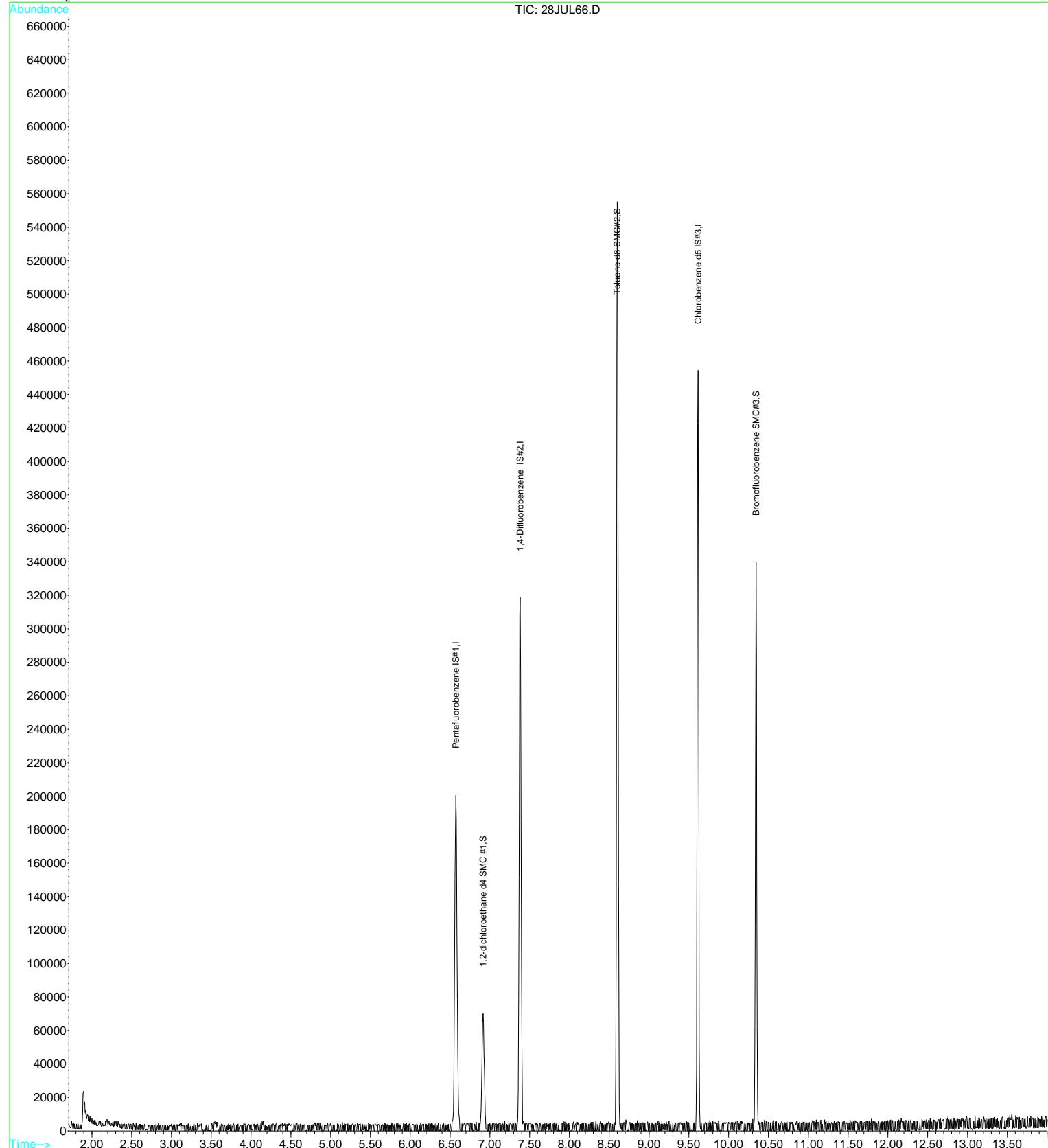
21) 1,2-dichloroethane d4 SMC	6.92	65	46811	10.06	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	100.60%
31) Toluene d8 SMC#2	8.60	98	286302	9.76	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.60%
49) Bromofluorobenzene SMC#3	10.34	95	90587	10.04	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	100.40%

Target Compounds	Qvalue
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Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL66.D Vial: 66
 Acq On : 29 Jul 2017 8:25 am Operator: MGC
 Sample : B[G2380-BLK1] Inst : MS-V5
 Misc : 1 PB1;VRL-15-5710:25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 9:39 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL66.D Vial: 66
Acq On : 29 Jul 2017 8:25 am Operator: MGC
Sample : B[G2380-BLK1 Inst : MS-V5
Misc : 1 PB1;VRL-15-5710;25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:40 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration
DataAcq Meth : 82605

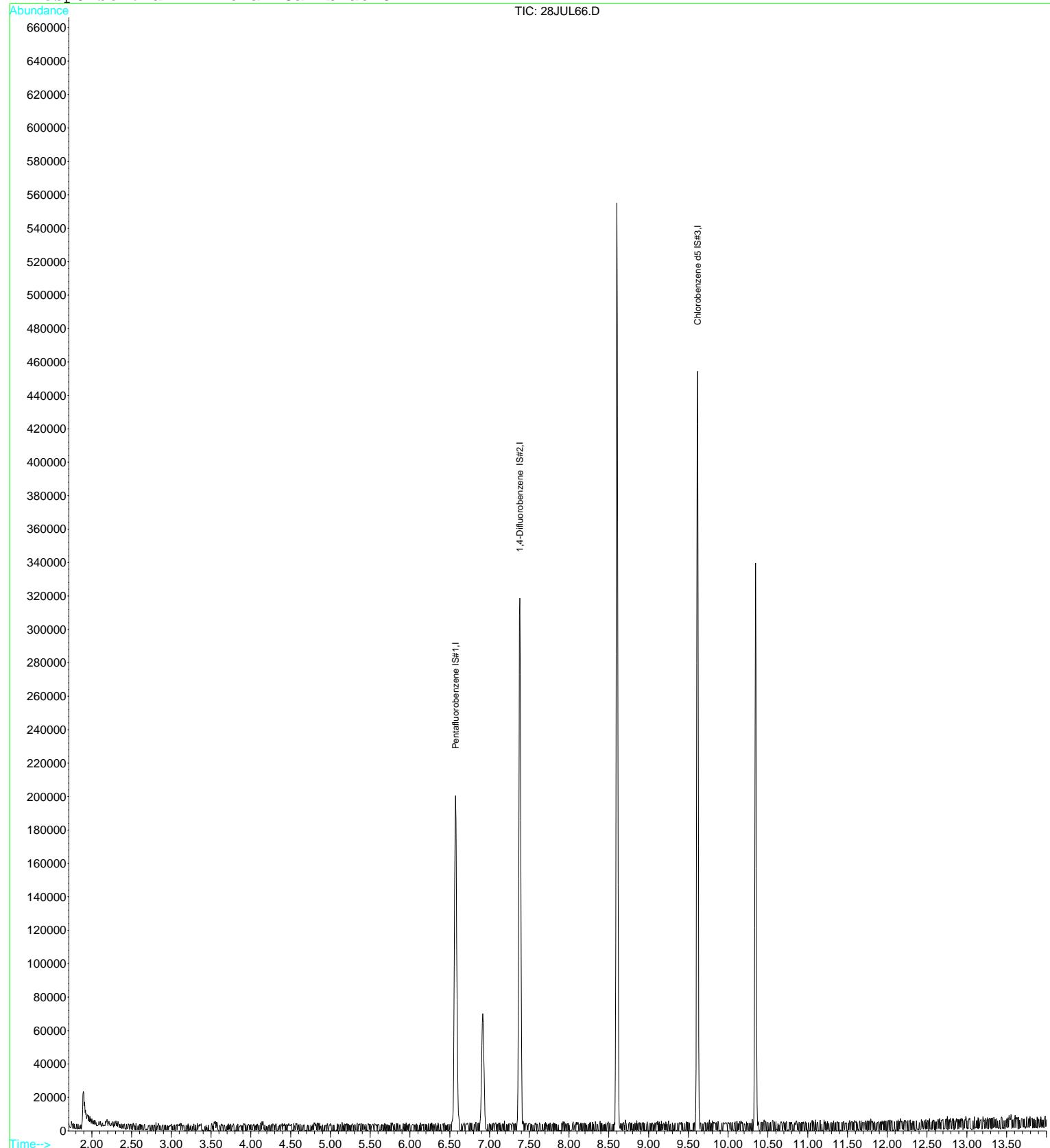
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----	-----	-----	-----	-----	-----	-----
1) Pentafluorobenzene IS#1	6.57	168	159258	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	237571	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	60434	10.00	ug/L	0.00

Target Compounds	Qvalue
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Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL66.D Vial: 66
Acq On : 29 Jul 2017 8:25 am Operator: MGC
Sample : B[G2380-BLK1 Inst : MS-V5
Misc : 1 PB1;VRL-15-5710:25ML Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jul 29 9:40 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
Title : EPA Method 624/8260
Last Update : Fri Jul 21 04:19:15 2017
Response via : Initial Calibration





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Raw Data - Matrix Spike

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL73.D Vial: 3
 Acq On : 29 Jul 2017 11:05 am Operator: MGC
 Sample : B[G2380-MS1] Inst : MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multipllr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 29 11:19 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	185201	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	271846	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.62	119	69225	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	55041	10.18	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	101.80%
31) Toluene d8 SMC#2	8.60	98	328434	9.78	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	97.80%
49) Bromofluorobenzene SMC#3	10.34	95	103691	10.03	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	100.30%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	1.76	85	252323	27.38	ug/L
3) Chloromethane	1.95	50	380041	21.81	ug/L
4) Vinyl chloride	2.07	62	343564	24.75	ug/L #
5) Bromomethane	2.44	94	171319	22.76	ug/L #
6) Chloroethane	2.56	64	217859	22.86	ug/L
7) Trichlorofluoromethane	2.86	101	299866	26.29	ug/L
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	203463	25.98	ug/L #
9) 1,1-Dichloroethene	3.51	61	387866	25.95	ug/L
10) Methylene chloride	4.15	84	180834	22.63	ug/L
11) MTBE	4.48	73	265288	23.72	ug/L #
12) T-1,2-dichloroethene	4.50	96	228952	24.68	ug/L
13) 1,1-Dichloroethane	5.05	63	468137	23.62	ug/L
14) 2,2-Dichloropropane	5.83	77	296697	26.60	ug/L
15) Cis-1,2-dichloroethene	5.82	96	235089	24.31	ug/L
16) Bromochloromethane	6.18	128	73060	23.70	ug/L #
17) Chloroform	6.32	83	337604	24.08	ug/L
18) 1,1,1-Trichloroethane	6.53	97	322676	26.58	ug/L #
19) 1,1-Dichloropropene	6.72	75	296574	23.39	ug/L
20) Carbon tetrachloride	6.71	119	227163	27.30	ug/L
22) 1,2-Dichloroethane	7.00	62	180555	23.97	ug/L #
23) Benzene	6.94	78	870498	22.95	ug/L #
25) Trichloroethene	7.60	130	244434	26.18	ug/L
26) 1,2-Dichloropropane	7.83	63	236903	22.97	ug/L
27) Dibromomethane	7.90	93	66163	25.41	ug/L
28) Bromodichloromethane	8.05	83	202332	25.85	ug/L
30) Cis-1,3-dichloropropene	8.40	75	242831	24.85	ug/L
32) Toluene	8.65	92	600853	25.51	ug/L
33) Trans-1,3-dichloropropene	8.82	75	164715	25.83	ug/L #
34) 1,1,2-Trichloroethane	8.96	97	100007	23.64	ug/L
35) Tetrachloroethene (PCE)	9.03	166	243157	27.18	ug/L
36) 1,3-Dichloropropane	9.08	76	159903	23.26	ug/L
37) Dibromochloromethane	9.24	129	110165	26.94	ug/L #
38) 1,2-Dibromoethane	9.32	107	89448	25.43	ug/L
40) Chlorobenzene	9.64	112	546215	23.79	ug/L
41) 1,1,1,2-Tetrachloroethane	9.69	131	157615	27.90	ug/L
42) Ethylbenzene	9.69	106	352151	26.11	ug/L
43) P+m-Xylene	9.77	106	857600	51.98	ug/L
44) O-Xylene	10.01	106	397823	26.09	ug/L
45) Styrene	10.02	104	634378	27.30	ug/L
46) Bromoform	10.15	173	47633	28.03	ug/L #
47) Isopropylbenzene	10.23	105	1060054	26.86	ug/L
48) 1,1,2,2-Tetrachloroethane	10.40	83	96273	25.58	ug/L
50) 1,2,3-Trichloropropane	10.45	110	22014	27.51	ug/L #
51) n-propylbenzene	10.48	91	1285948	25.09	ug/L
52) bromobenzene	10.44	156	222685	27.55	ug/L

(#= qualifier out of range (m) = manual integration

28JUL73.D 82605.M Sat Jul 29 11:26:31 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL73.D Vial: 3
 Acq On : 29 Jul 2017 11:05 am Operator: MGC
 Sample : B[G2380-MS1] Inst : MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 11:19 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53) 1,3,5-trimethylbenzene	10.57	105	908889	27.83	ug/L	93
54) 2-chlorotoluene	10.54	91	810044	25.02	ug/L	98
55) 4-chlorotoluene	10.61	91	732804	25.06	ug/L	97
56) tert-butylbenzene	10.76	119	850403	26.36	ug/L	96
57) 1,2,4-trimethylbenzene	10.79	105	852362	26.35	ug/L	94
58) sec-butylbenzene	10.89	105	1188095	27.18	ug/L	98
59) 4-isopropyltoluene	10.97	119	970529	27.23	ug/L	96
60) 1,3-Dichlorobenzene	10.98	146	447237	25.84	ug/L	93
61) 1,4-Dichlorobenzene	11.03	146	431823	25.53	ug/L	94
62) n-butylbenzene	11.19	91	873638	26.30	ug/L	98
63) 1,2-Dichlorobenzene	11.24	146	367061	24.59	ug/L	96
64) Hexachloroethane	11.40	117	141414	23.61	ug/L #	69
65) 1,2-dibromo-3-chloropropan	11.66	75	12990	25.60	ug/L	98
66) 1,2,4-trichlorobenzene	12.11	180	249667	28.88	ug/L	98
67) hexachlorobutadiene	12.17	225	172689	28.85	ug/L #	86
68) naphthalene	12.26	128	277332	25.53	ug/L	100
69) 1,2,3-trichlorobenzene	12.38	180	202494	27.91	ug/L #	87

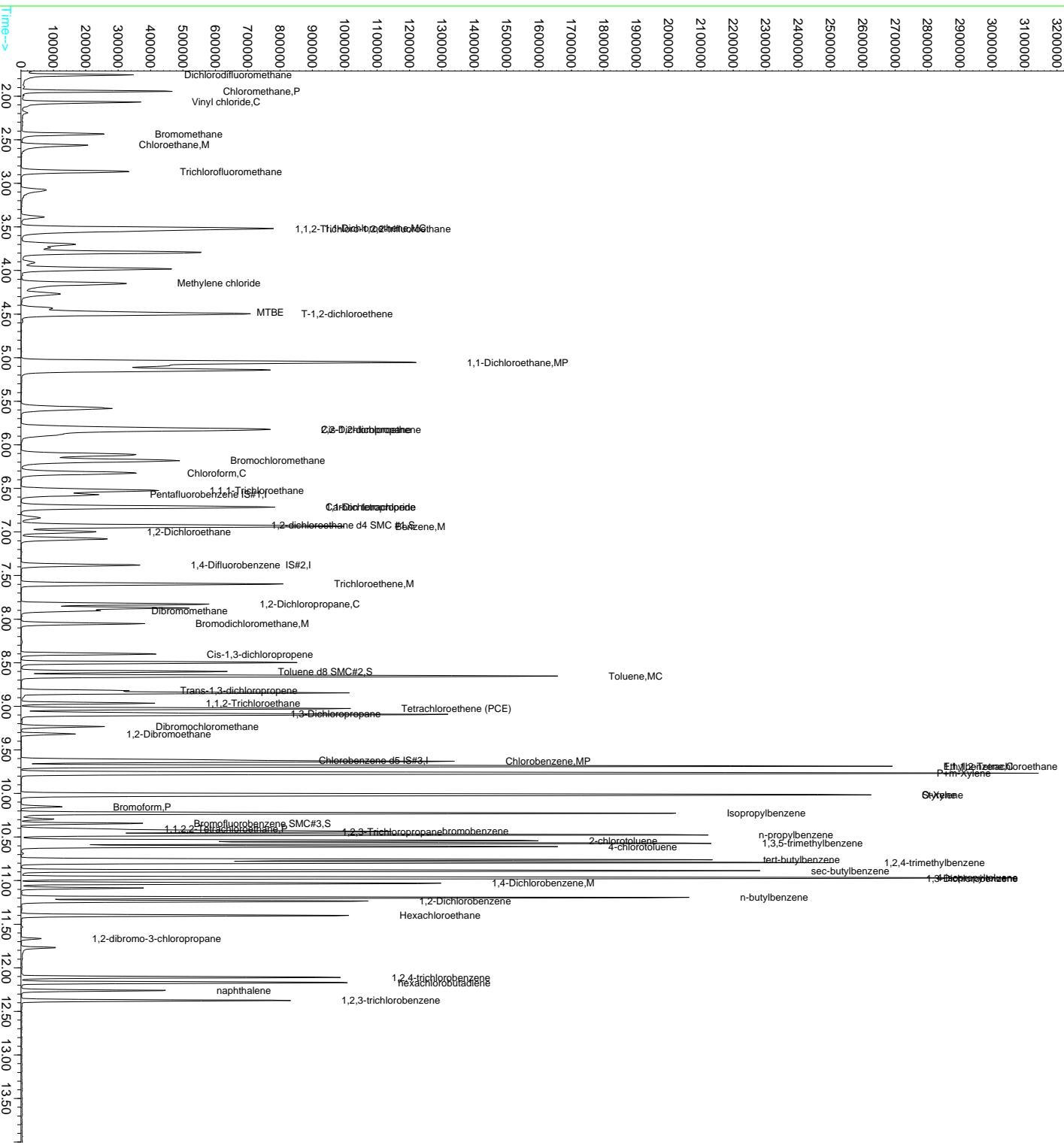
(#) = qualifier out of range (m) = manual integration
 28JUL73.D 82605.M Sat Jul 29 11:26:31 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL73.D Vial: 3
 Acq On : 29 Jul 2017 11:05 am Operator: MGC
 Sample : B1G2380-MS1 Inst: MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multipl: 1.00
 MS Integration Params: rteint.P
 Quant Time: Jul 29 11:19 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration

Abundance



Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL73.D Vial: 3
 Acq On : 29 Jul 2017 11:05 am Operator: MGC
 Sample : B[G2380-MS1] Inst : MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 29 11:26 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)

Title : EPA Method 624/8260

Last Update : Fri Jul 21 04:19:15 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	185201	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	271846	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.62	119	69225	10.00	ug/L	0.00

Target Compounds

					Qvalue
2) ethanol	3.08	45	132921	3980.36	ug/L # 74
6) isopropyl alcohol	3.74	45	132121	858.31	ug/L # 1
7) Acrolein	3.39	56	76635	227.07	ug/L 90
8) acetone	3.55	43	234674	307.51	ug/L 97
9) tert-butyl alcohol (TBA)	4.27	59	182201	831.54	ug/L 100
10) acetonitrile	3.91	41	57149	157.25	ug/L 98
11) methyl acetate	3.96	43	5277	2.30	ug/L # 41
12) allyl chloride	3.98	41	591341	31.83	ug/L 98
13) iodomethane	3.70	142	260186	23.83	ug/L 97
14) acrylonitrile	4.43	53	100394	79.79	ug/L 95
15) carbon disulfide	3.79	76	873622	31.11	ug/L 100
17) diisopropyl ether	5.10	87	107049	15.47	ug/L 92
18) Vinyl acetate	5.05	43	1698055	157.09	ug/L 97
19) chloroprene	5.14	53	651659	33.37	ug/L 96
20) tert-butyl ethyl ether	5.58	59	349997	15.45	ug/L 98
21) 2-butanone (MEK)	5.80	43	214518	158.32	ug/L 90
22) propionitrile	5.88	54	181743	399.53	ug/L # 89
23) Isobutyl alcohol	6.83	43	46208	440.28	ug/L # 35
24) methacrylonitrile	6.12	67	183570	148.03	ug/L 95
26) tetrahydrofuran	6.18	42	278042	305.75	ug/L 95
28) tert-amyl methyl ether (TA)	7.08	73	190076	15.26	ug/L 88
30) methyl methacrylate	7.87	69	160464	79.06	ug/L 83
32) 1,4-dioxane	7.89	88	49298	1994.59	ug/L 98
33) Methyl isobutyl ketone(mib	8.50	43	509160	167.40	ug/L 98
34) ethyl methacrylate	8.85	69	391241	84.26	ug/L 96
35) 2-hexanone	9.09	43	678287	329.20	ug/L 97
38) cyclohexanone	10.29	55	41693	91.00	ug/L 94
39) t-1,4-dichloro-2-butene	10.42	75	168330	230.96	ug/L # 17
41) Pentachloroethane	10.80	167	70378	25.41	ug/L # 79
42) benzyl chloride	11.09	91	194188	40.97	ug/L 94

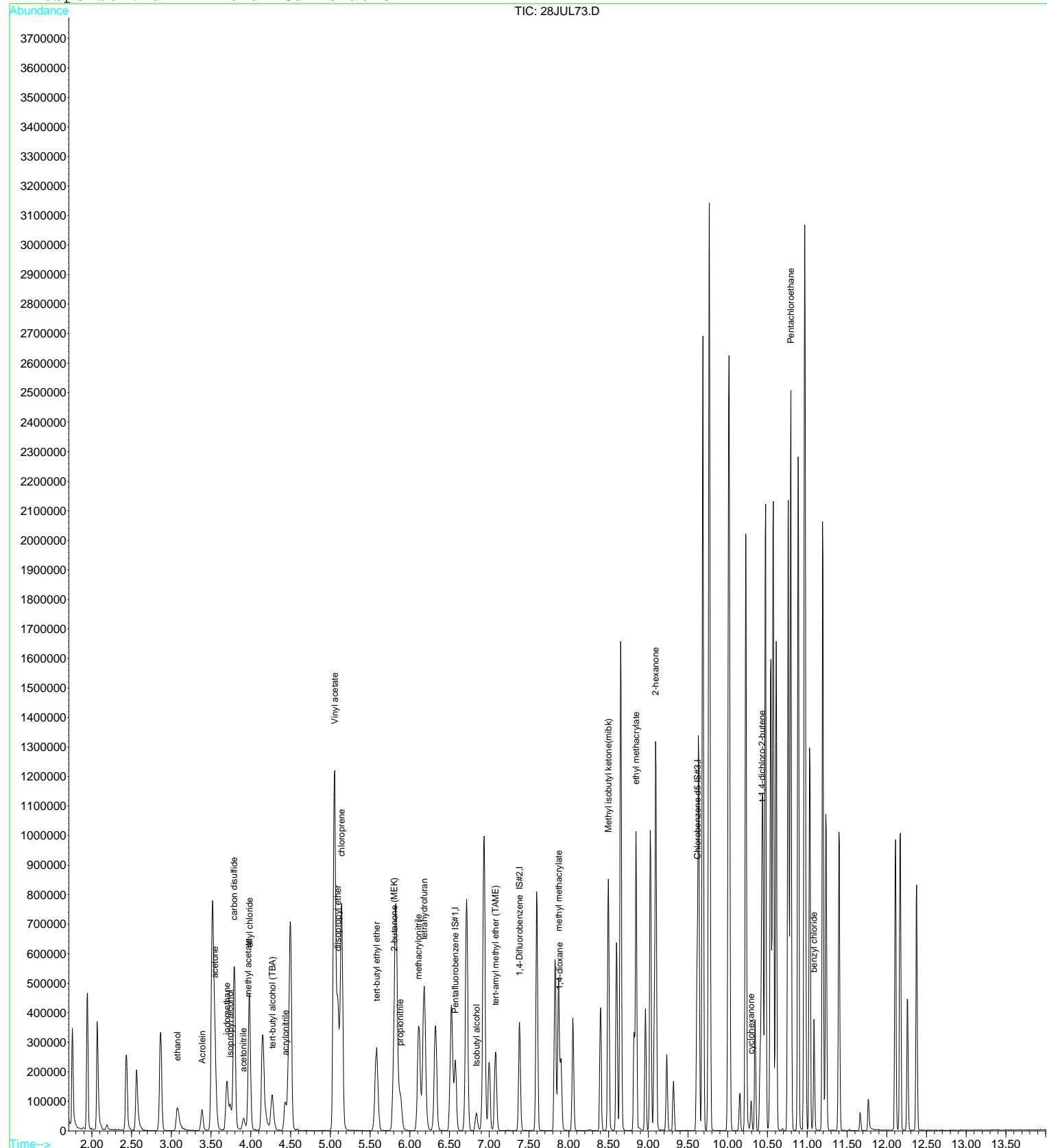
(#= qualifier out of range (m)= manual integration

28JUL73.D 82605X.M Sat Jul 29 11:27:01 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL73.D Vial: 3
 Acq On : 29 Jul 2017 11:05 am Operator: MGC
 Sample : B[G2380-MS1 Inst : MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 11:26 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration





Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Matrix Spike Duplicate

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL74.D Vial: 4
 Acq On : 29 Jul 2017 11:28 am Operator: MGC
 Sample : B[G2380-MSD1 Inst : MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multipllr: 1.00
 MS Integration Params: rteint.p

Quant Time: Jul 29 11:42 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	197024	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	279582	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	74653	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.91	65	56375	9.80	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	98.00%
31) Toluene d8 SMC#2	8.60	98	338809	9.81	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	98.10%
49) Bromofluorobenzene SMC#3	10.34	95	110345	9.90	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.00%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	1.75	85	258941	26.41	ug/L
3) Chloromethane	1.94	50	383989	20.72	ug/L
4) Vinyl chloride	2.07	62	344176	23.31	ug/L #
5) Bromomethane	2.44	94	172240	21.50	ug/L #
6) Chloroethane	2.56	64	220281	21.73	ug/L
7) Trichlorofluoromethane	2.87	101	299775	24.70	ug/L
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	210989	25.33	ug/L #
9) 1,1-Dichloroethene	3.51	61	400299	25.18	ug/L
10) Methylene chloride	4.15	84	188723	22.20	ug/L
11) MTBE	4.48	73	269137	22.62	ug/L #
12) T-1,2-dichloroethene	4.50	96	232462	23.55	ug/L
13) 1,1-Dichloroethane	5.05	63	469533	22.27	ug/L
14) 2,2-Dichloropropane	5.83	77	296973	25.03	ug/L
15) Cis-1,2-dichloroethene	5.83	96	234560	22.80	ug/L
16) Bromochloromethane	6.18	128	76028	23.19	ug/L #
17) Chloroform	6.32	83	337641	22.63	ug/L
18) 1,1,1-Trichloroethane	6.52	97	324429	25.12	ug/L #
19) 1,1-Dichloropropene	6.72	75	300629	22.29	ug/L
20) Carbon tetrachloride	6.71	119	227656	25.71	ug/L
22) 1,2-Dichloroethane	7.00	62	182829	22.81	ug/L #
23) Benzene	6.93	78	896467	22.22	ug/L #
25) Trichloroethene	7.59	130	249321	25.97	ug/L
26) 1,2-Dichloropropane	7.83	63	250029	23.57	ug/L
27) Dibromomethane	7.90	93	68760	25.68	ug/L
28) Bromodichloromethane	8.05	83	198976	24.72	ug/L
29) 2-ceve	8.31	63	140	0.05	ug/L #
30) Cis-1,3-dichloropropene	8.40	75	248670	24.75	ug/L
32) Toluene	8.66	92	608710	25.13	ug/L
33) Trans-1,3-dichloropropene	8.82	75	168710	25.72	ug/L #
34) 1,1,2-Trichloroethane	8.96	97	104079	23.92	ug/L
35) Tetrachloroethene (PCE)	9.03	166	245729	26.71	ug/L
36) 1,3-Dichloropropane	9.08	76	163509	23.13	ug/L
37) Dibromochloromethane	9.23	129	110346	26.24	ug/L #
38) 1,2-Dibromoethane	9.32	107	87331	24.14	ug/L
40) Chlorobenzene	9.63	112	553775	22.37	ug/L
41) 1,1,1,2-Tetrachloroethane	9.69	131	162376	26.65	ug/L
42) Ethylbenzene	9.69	106	367602	25.27	ug/L
43) P+m-Xylene	9.77	106	867478	48.76	ug/L
44) O-Xylene	10.01	106	404977	24.63	ug/L
45) Styrene	10.02	104	640885	25.57	ug/L
46) Bromoform	10.15	173	49704	27.12	ug/L #
47) Isopropylbenzene	10.23	105	1072472	25.20	ug/L
48) 1,1,2,2-Tetrachloroethane	10.41	83	98302	24.22	ug/L
50) 1,2,3-Trichloropropane	10.45	110	22201	25.73	ug/L #
51) n-propylbenzene	10.47	91	1281920	23.19	ug/L

(#) = qualifier out of range (m) = manual integration

28JUL74.D 82605.M Sat Jul 29 12:20:21 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL74.D Vial: 4
 Acq On : 29 Jul 2017 11:28 am Operator: MGC
 Sample : B[G2380-MSD1] Inst : MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 11:42 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	225021	25.81	ug/L	89
53) 1,3,5-trimethylbenzene	10.57	105	903001	25.64	ug/L	93
54) 2-chlorotoluene	10.54	91	814841	23.34	ug/L	99
55) 4-chlorotoluene	10.61	91	724785	22.99	ug/L	98
56) tert-butylbenzene	10.76	119	862962	24.80	ug/L	94
57) 1,2,4-trimethylbenzene	10.79	105	859425	24.64	ug/L	93
58) sec-butylbenzene	10.89	105	1220674	25.90	ug/L	98
59) 4-isopropyltoluene	10.97	119	980522	25.51	ug/L	97
60) 1,3-Dichlorobenzene	10.98	146	447228	23.96	ug/L	93
61) 1,4-Dichlorobenzene	11.03	146	433402	23.76	ug/L	94
62) n-butylbenzene	11.20	91	879990	24.57	ug/L	98
63) 1,2-Dichlorobenzene	11.24	146	372265	23.12	ug/L	96
64) Hexachloroethane	11.40	117	143166	22.27	ug/L #	69
65) 1,2-dibromo-3-chloropropan	11.66	75	13628	24.90	ug/L	95
66) 1,2,4-trichlorobenzene	12.11	180	250268	26.84	ug/L	98
67) hexachlorobutadiene	12.17	225	167875	26.01	ug/L #	87
68) naphthalene	12.26	128	283894	24.24	ug/L	100
69) 1,2,3-trichlorobenzene	12.37	180	205125	26.21	ug/L #	90

(#) = qualifier out of range (m) = manual integration
 28JUL74.D 82605.M Sat Jul 29 12:20:21 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL74.D Vial: 4
 Acq On : 29 Jul 2017 11:28 am Operator: MGC
 Sample : B1G2380-MSD1 Inst: MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multipl: 1.00
 MS Integration Params: rteint.P
 Quant Time: Jul 29 11:42 2017 Quant Results File: 82605.RES
 Abundance
 Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration

TIC: 28JUL74.D
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Chloromethane,P
 Vinyl chloride,C
 Bromomethane
 Chloroethane,M
 Trichlorofluoromethane
 1,1,2-Dichloroethane,21Moroethane
 Methylene chloride
 MTBE T-1,2-dichloroethene
 1,1-Dichloroethane,MP
 2,1,1-Dichloroethane
 Bromochloromethane
 Chloroform,C
 Pentafluorobenzene IS#1,S
 1,1,1-Trichloroethane
 Carbodieraphide
 1,2-Dichloroethane 1,2-dichloroethane d4 SMC #1,S Benzene,M
 1,4-Difluorobenzene IS#2,I
 Trichloroethene,M
 Dibromomethane 1,2-Dichloropropane,C
 Bromodichloromethane,M
 2-ceve Cis-1,3-dichloropropene
 Trans-1,3-dichloropropene
 1,1,2-Trichloroethane
 1,3-Dichloropropane Tetrachloroethene (PCE)
 Dibromo-chloromethane
 1,2-Dibromoethane
 Chlorobenzene d5 IS#3,I Chlorobenzene,MP
 Ethylbenzene,Tetrahaloethane
 Ethyl Xylene
 Styrene,Xylene
 Isopropylbenzene
 n-propylbenzene
 1,3,5-trimethylbenzene
 tert-butylbenzene 1,2,4-trimethylbenzene
 sec-butylbenzene 143-diphenylbenzene
 1,4-Dichlorobenzene,M
 n-butylbenzene
 1,2-Dichlorobenzene
 Hexachloroethane
 1,2-dibromo-3-chloropropane
 naphthalene
 1,2,4-trichlorobenzene
 hexachlorobutadiene
 1,2,3-trichlorobenzene

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL74.D Vial: 4
 Acq On : 29 Jul 2017 11:28 am Operator: MGC
 Sample : B[G2380-MSD1 Inst : MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multiplr: 1.00
 MS Integration Params: rteint.p

Quant Time: Jul 29 12:20 2017 Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)

Title : EPA Method 624/8260

Last Update : Fri Jul 21 04:19:15 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.57	168	197024	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	279582	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	74653	10.00	ug/L	0.00

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) ethanol	3.08	45	137950	3883.06	ug/L	# 74
6) isopropyl alcohol	3.74	45	134538	821.56	ug/L	# 70
7) Acrolein	3.39	56	83183	231.68	ug/L	89
8) acetone	3.55	43	215602	265.57	ug/L	99
9) tert-butyl alcohol (TBA)	4.27	59	175103	751.19	ug/L	100
10) acetonitrile	3.91	41	60207	155.72	ug/L	91
11) methyl acetate	3.96	43	4197	1.72	ug/L	# 38
12) allyl chloride	3.98	41	580491	29.37	ug/L	98
13) iodomethane	3.70	142	309970	26.69	ug/L	98
14) acrylonitrile	4.43	53	98681	73.72	ug/L	94
15) carbon disulfide	3.79	76	869584	29.11	ug/L	99
17) diisopropyl ether	5.09	87	105345	14.31	ug/L	82
18) Vinyl acetate	5.05	43	1612836	140.25	ug/L	97
19) chloroprene	5.14	53	627714	30.22	ug/L	94
20) tert-butyl ethyl ether	5.58	59	332467	13.80	ug/L	99
21) 2-butanone (MEK)	5.80	43	200317	138.97	ug/L	92
22) propionitrile	5.88	54	181238	374.51	ug/L	# 90
23) Isobutyl alcohol	6.83	43	47957	429.53	ug/L	# 33
24) methacrylonitrile	6.11	67	181462	137.55	ug/L	96
26) tetrahydrofuran	6.19	42	265464	274.40	ug/L	92
28) tert-amyl methyl ether (TA	7.08	73	183003	13.81	ug/L	87
30) methyl methacrylate	7.87	69	157363	75.39	ug/L	86
32) 1,4-dioxane	7.89	88	49007	1927.95	ug/L	100
33) Methyl isobutyl ketone(mib	8.50	43	481881	154.05	ug/L	99
34) ethyl methacrylate	8.85	69	367848	77.03	ug/L	96
35) 2-hexanone	9.10	43	635833	300.06	ug/L	96
38) cyclohexanone	10.29	55	39707	80.37	ug/L	96
39) t-1,4-dichloro-2-butene	10.43	75	173193	220.35	ug/L	# 15
41) Pentachloroethane	10.80	167	66592	22.30	ug/L	# 80
42) benzyl chloride	11.08	91	188258	37.11	ug/L	95

(#) = qualifier out of range (m) = manual integration

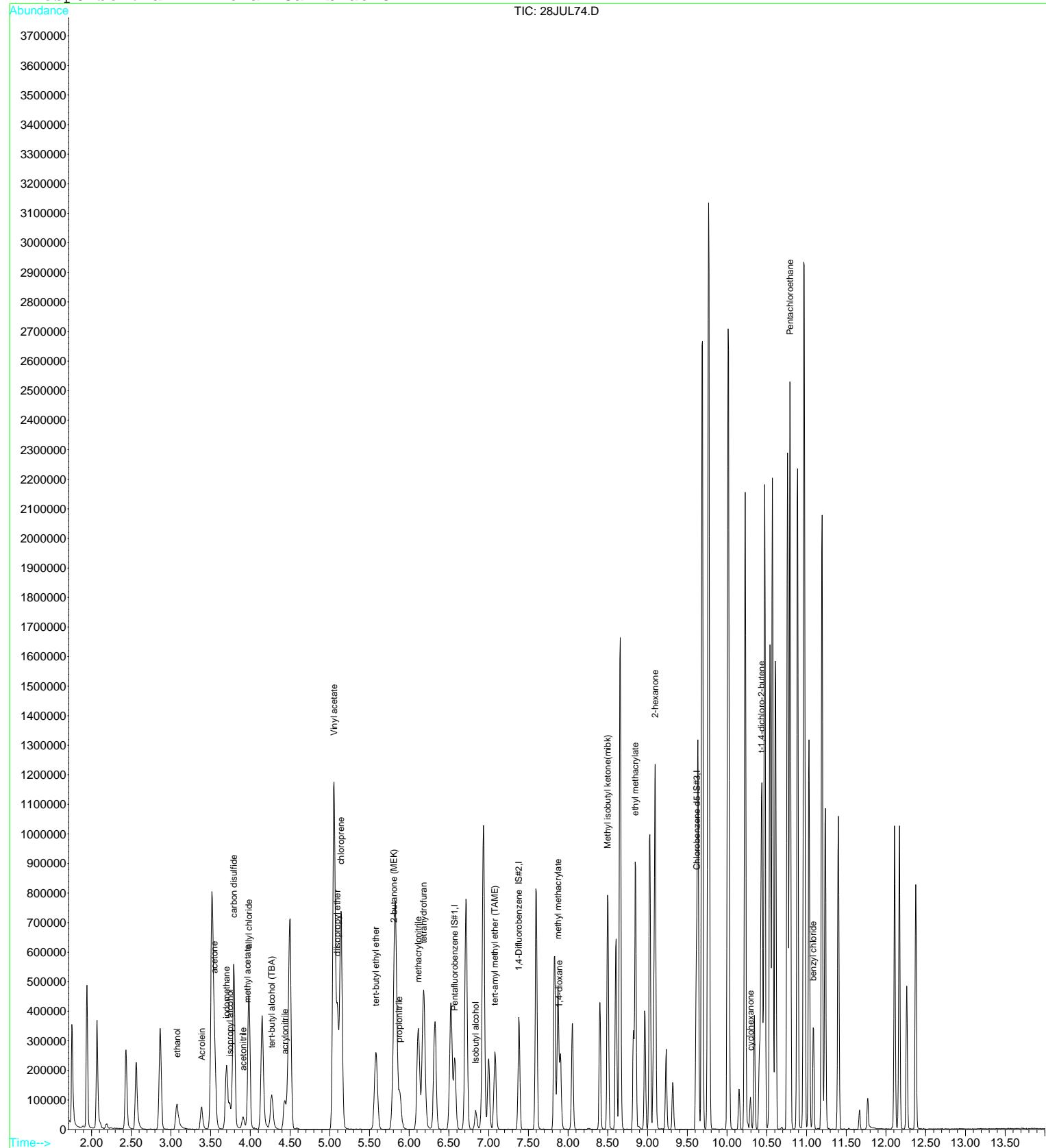
28JUL74.D 82605X.M Sat Jul 29 12:20:54 2017

Page 1

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL74.D Vial: 4
 Acq On : 29 Jul 2017 11:28 am Operator: MGC
 Sample : B[G2380-MSD1 Inst : MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 12:20 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration





Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Lab Control Sample

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL72.D Vial: 2
 Acq On : 29 Jul 2017 10:42 am Operator: MGC
 Sample : B[G2380-BS1] Inst : MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multipllr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 29 10:56 2017

Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)

Title : EPA Method 624/524.2/8260

Last Update : Thu Jul 20 11:28:22 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	180484	10.00	ug/L	0.00
24) 1,4-Difluorobenzene IS#2	7.38	114	263522	10.00	ug/L	0.00
39) Chlorobenzene d5 IS#3	9.61	119	69619	10.00	ug/L	0.00

System Monitoring Compounds

21) 1,2-dichloroethane d4 SMC	6.92	65	50774	9.63	ug/L	0.00
Spiked Amount	10.000	Range	75 - 125	Recovery	=	96.30%
31) Toluene d8 SMC#2	8.60	98	324834	9.98	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	99.80%
49) Bromofluorobenzene SMC#3	10.35	95	106353	10.23	ug/L	0.00
Spiked Amount	10.000	Range	80 - 120	Recovery	=	102.30%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	1.75	85	257773	28.70	ug/L
3) Chloromethane	1.94	50	370441	21.82	ug/L
4) Vinyl chloride	2.07	62	337908	24.98	ug/L
5) Bromomethane	2.44	94	152469	20.78	ug/L
6) Chloroethane	2.56	64	204998	22.07	ug/L
7) Trichlorofluoromethane	2.87	101	297389	26.75	ug/L
8) 1,1,2-Trichloro-1,2,2-trif	3.53	101	203777	26.70	ug/L
9) 1,1-Dichloroethene	3.52	61	386296	26.52	ug/L
10) Methylene chloride	4.15	84	180336	23.16	ug/L
11) MTBE	4.48	73	246061	22.58	ug/L
12) T-1,2-dichloroethene	4.50	96	222471	24.61	ug/L
13) 1,1-Dichloroethane	5.05	63	454250	23.52	ug/L
14) 2,2-Dichloropropane	5.83	77	291714	26.84	ug/L
15) Cis-1,2-dichloroethene	5.82	96	221855	23.54	ug/L
16) Bromochloromethane	6.18	128	68828	22.91	ug/L
17) Chloroform	6.32	83	326134	23.87	ug/L
18) 1,1,1-Trichloroethane	6.52	97	310309	26.23	ug/L
19) 1,1-Dichloropropene	6.72	75	284257	23.01	ug/L
20) Carbon tetrachloride	6.71	119	219397	27.05	ug/L
22) 1,2-Dichloroethane	7.00	62	181452	24.71	ug/L
23) Benzene	6.93	78	845171	22.87	ug/L
25) Trichloroethene	7.60	130	235534	26.03	ug/L
26) 1,2-Dichloropropane	7.83	63	227189	22.72	ug/L
27) Dibromomethane	7.91	93	63895	25.32	ug/L
28) Bromodichloromethane	8.05	83	190316	25.09	ug/L
29) 2-ceve	8.28	63	227739	88.20	ug/L
30) Cis-1,3-dichloropropene	8.40	75	230633	24.35	ug/L
32) Toluene	8.66	92	571937	25.05	ug/L
33) Trans-1,3-dichloropropene	8.82	75	157974	25.55	ug/L
34) 1,1,2-Trichloroethane	8.97	97	95410	23.26	ug/L
35) Tetrachloroethene (PCE)	9.03	166	245110	28.27	ug/L
36) 1,3-Dichloropropane	9.08	76	148597	22.30	ug/L
37) Dibromochloromethane	9.23	129	104744	26.42	ug/L
38) 1,2-Dibromoethane	9.32	107	84666	24.83	ug/L
40) Chlorobenzene	9.63	112	538587	23.33	ug/L
41) 1,1,1,2-Tetrachloroethane	9.69	131	156438	27.54	ug/L
42) Ethylbenzene	9.68	106	348561	25.70	ug/L
43) P+m-Xylene	9.77	106	847872	51.10	ug/L
44) O-Xylene	10.01	106	393856	25.69	ug/L
45) Styrene	10.02	104	610045	26.10	ug/L
46) Bromoform	10.15	173	45538	26.65	ug/L
47) Isopropylbenzene	10.23	105	1066314	26.87	ug/L
48) 1,1,2,2-Tetrachloroethane	10.41	83	88400	23.35	ug/L
50) 1,2,3-Trichloropropane	10.45	110	21883	27.19	ug/L
51) n-propylbenzene	10.47	91	1284989	24.93	ug/L

(#= qualifier out of range (m) = manual integration

28JUL72.D 82605.M Sat Jul 29 11:25:10 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL72.D Vial: 2
 Acq On : 29 Jul 2017 10:42 am Operator: MGC
 Sample : B[G2380-BS1] Inst : MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 10:56 2017 Quant Results File: 82605.RES

Quant Method : C:\HPCHEM\1...\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration
 DataAcq Meth : 82605

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
52) bromobenzene	10.44	156	217174	26.71	ug/L	90
53) 1,3,5-trimethylbenzene	10.57	105	888382	27.05	ug/L	94
54) 2-chlorotoluene	10.54	91	806923	24.78	ug/L	99
55) 4-chlorotoluene	10.61	91	708710	24.10	ug/L	97
56) tert-butylbenzene	10.76	119	839389	25.87	ug/L	93
57) 1,2,4-trimethylbenzene	10.79	105	836750	25.72	ug/L	93
58) sec-butylbenzene	10.89	105	1201275	27.33	ug/L	98
59) 4-isopropyltoluene	10.97	119	981619	27.38	ug/L	96
60) 1,3-Dichlorobenzene	10.98	146	438734	25.21	ug/L	92
61) 1,4-Dichlorobenzene	11.03	146	423930	24.92	ug/L	94
62) n-butylbenzene	11.20	91	868456	26.00	ug/L	98
63) 1,2-Dichlorobenzene	11.24	146	356590	23.75	ug/L	96
64) Hexachloroethane	11.40	117	138645	23.06	ug/L #	69
65) 1,2-dibromo-3-chloropropan	11.67	75	11550	22.63	ug/L	95
66) 1,2,4-trichlorobenzene	12.11	180	240640	27.68	ug/L	98
67) hexachlorobutadiene	12.17	225	171009	28.41	ug/L #	85
68) naphthalene	12.26	128	254550	23.30	ug/L	100
69) 1,2,3-trichlorobenzene	12.37	180	199467	27.33	ug/L #	92

(#) = qualifier out of range (m) = manual integration

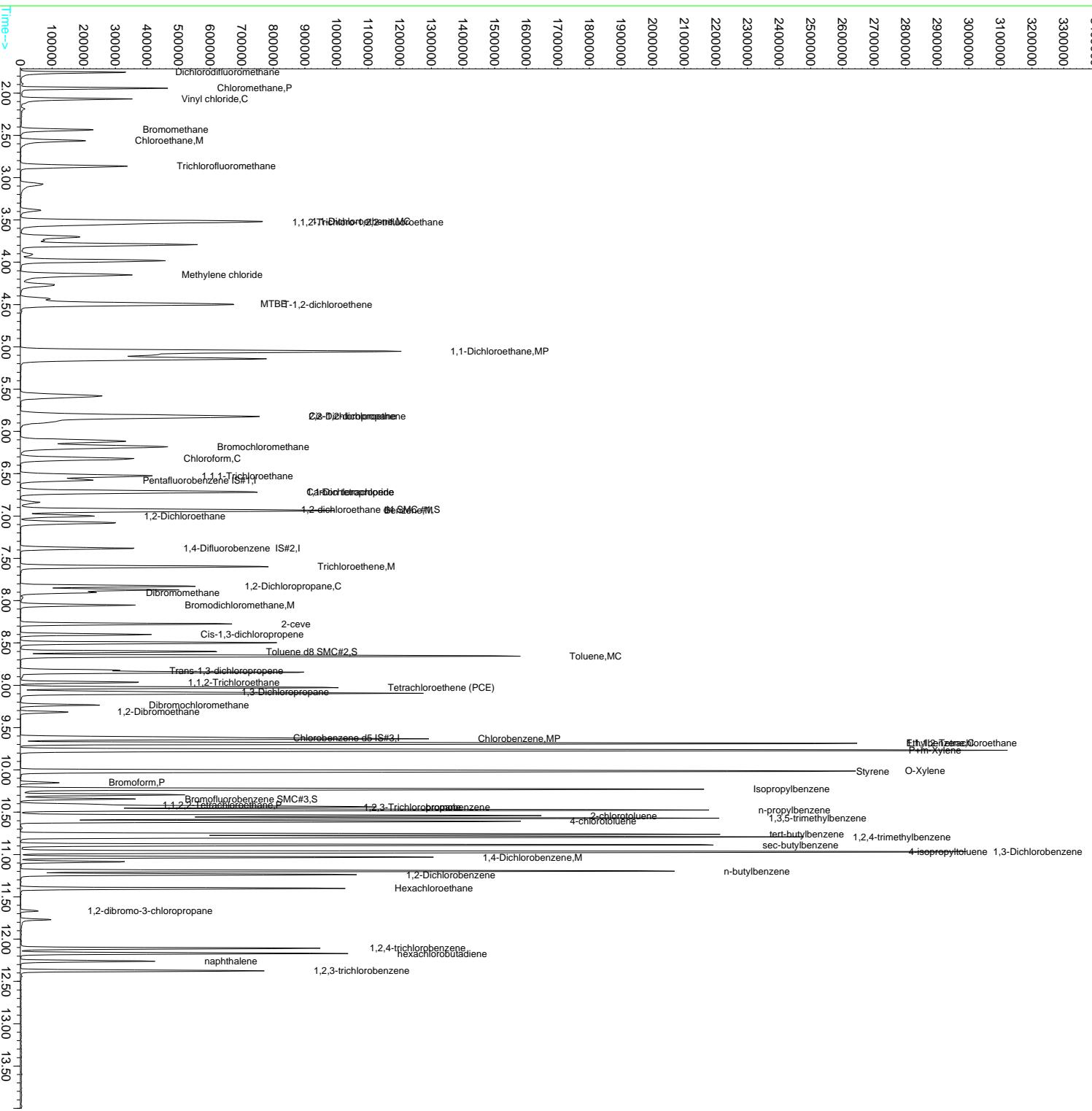
28JUL72.D 82605.M Sat Jul 29 11:25:10 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL72.D Vial: 2
 Acq On : 29 Jul 2017 10:42 am Operator: MGC
 Sample : B1G2380-BS1 Inst: MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 10:56 2017 Quant Results File: 82605.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1005\82605.M (RTE Integrator)
 Title : EPA Method 624/524.2/8260
 Last Update : Thu Jul 20 11:28:22 2017
 Response via : Initial Calibration

Abundance



Time--> 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 6.00 6.50 7.00 7.50 8.00 8.50 9.00 9.50 10.00 10.50 11.00 11.50 12.00 12.50 13.00 13.50

28JUL72.D 82605.M Sat Jul 29 11:25:10 2017

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL72.D Vial: 2
 Acq On : 29 Jul 2017 10:42 am Operator: MGC
 Sample : B[G2380-BS1] Inst : MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jul 29 11:25 2017

Quant Results File: 82605X.RES

Quant Method : C:\HPCHEM\1...\82605X.M (RTE Integrator)

Title : EPA Method 624/8260

Last Update : Fri Jul 21 04:19:15 2017

Response via : Initial Calibration

DataAcq Meth : 82605

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene IS#1	6.58	168	180484	10.00	ug/L	0.00
29) 1,4-Difluorobenzene IS#2	7.38	114	263522	10.00	ug/L	0.00
36) Chlorobenzene d5 IS#3	9.61	119	69619	10.00	ug/L	0.00

Target Compounds

					Qvalue
2) ethanol	3.08	45	123848	3805.59	ug/L # 75
6) isopropyl alcohol	3.74	45	115327	768.79	ug/L # 1
7) Acrolein	3.38	56	69544	211.44	ug/L 93
8) acetone	3.55	43	227733	306.22	ug/L 97
9) tert-butyl alcohol (TBA)	4.26	59	162810	762.46	ug/L 100
10) acetonitrile	3.91	41	53540	151.17	ug/L 83
11) methyl acetate	3.98	43	5187	2.32	ug/L # 73
12) allyl chloride	3.98	41	579169	31.99	ug/L 99
13) iodomethane	3.70	142	265435	24.95	ug/L 95
14) acrylonitrile	4.43	53	97078	79.17	ug/L 98
15) carbon disulfide	3.79	76	859689	31.42	ug/L 100
17) diisopropyl ether	5.09	87	104369	15.47	ug/L 87
18) Vinyl acetate	5.05	43	1636856	155.39	ug/L 98
19) chloroprene	5.14	53	649207	34.12	ug/L 98
20) tert-butyl ethyl ether	5.58	59	328300	14.88	ug/L 97
21) 2-butanone (MEK)	5.80	43	195182	147.82	ug/L 91
22) propionitrile	5.88	54	164690	371.51	ug/L # 89
23) Isobutyl alcohol	6.84	43	44775	437.78	ug/L # 37
24) methacrylonitrile	6.12	67	173452	143.53	ug/L 91
26) tetrahydrofuran	6.19	42	265518	299.61	ug/L 96
28) tert-amyl methyl ether (TA)	7.08	73	175720	14.47	ug/L 92
30) methyl methacrylate	7.87	69	151857	77.18	ug/L 87
32) 1,4-dioxane	7.89	88	45425	1895.94	ug/L 100
33) Methyl isobutyl ketone(mib	8.50	43	485472	164.66	ug/L 99
34) ethyl methacrylate	8.85	69	360051	80.00	ug/L 95
35) 2-hexanone	9.10	43	645993	323.43	ug/L 98
38) cyclohexanone	10.29	55	197665	429.00	ug/L 99
39) t-1,4-dichloro-2-butene	10.43	75	161384	220.18	ug/L # 18
41) Pentachloroethane	10.80	167	71257	25.59	ug/L 83
42) benzyl chloride	11.08	91	182894	38.54	ug/L 98

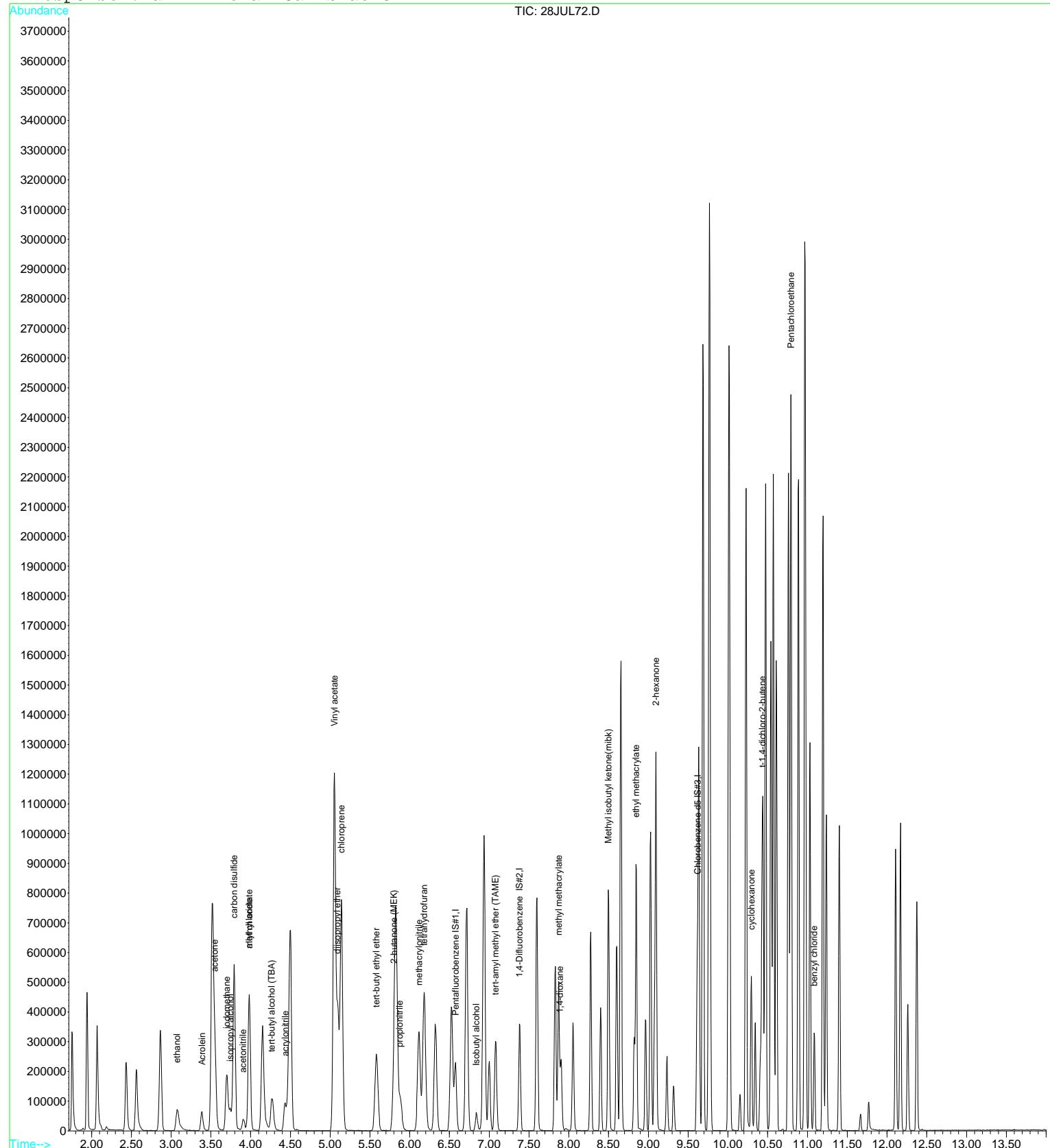
(#= qualifier out of range (m)= manual integration

28JUL72.D 82605X.M Sat Jul 29 11:25:38 2017

Quantitation Report

Data File : D:\DATA\MS-V5\JUL2017\JUL28\28JUL72.D Vial: 2
 Acq On : 29 Jul 2017 10:42 am Operator: MGC
 Sample : B[G2380-BS1 Inst : MS-V5
 Misc : 1 VO-109-70506;70519;70520;70521;25ML Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jul 29 11:25 2017 Quant Results File: 82605X.RES

Method : C:\HPCHEM\1\METHODS\MS-V5\201707\20-1441\82605X.M (RTE Integrator)
 Title : EPA Method 624/8260
 Last Update : Fri Jul 21 04:19:15 2017
 Response via : Initial Calibration





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Raw Data - Batch Information



PREPARATION BENCH SHEET

B|G2380

BC Laboratories

Printed: 8/24/2017 10:33:44AM

Matrix: Water

Prepared using: Volatiles - GC/MS - EPA 5030 Water MS

SurrogateUsed: 7G20041

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720267-01 A	gm8260w Full QC Navy	7/28/2017 7:00AM	MGC	25	25					4
1720267-02 A	gm8260w Full QC Navy	7/28/2017 7:00AM	MGC	25	25					4
1720267-03 A	gm8260w Full QC Navy	7/28/2017 7:00AM	MGC	25	25					4
1720267-04 A	gm8260w Full QC Navy	7/28/2017 7:00AM	MGC	25	25					4
1720267-05 A	gm8260w Full QC Navy	7/28/2017 7:00AM	MGC	25	25					4
1720267-06 A	gm8260w Full QC Navy	7/28/2017 7:00AM	MGC	25	25					4
1720267-07 A	gm8260w Full QC Navy	7/28/2017 7:00AM	MGC	25	25					4
1720267-08 A	gm8260w Full QC Navy	7/28/2017 7:00AM	MGC	25	25					4
1720267-09 A	gm8260w Full QC Navy	7/28/2017 7:00AM	MGC	25	25					4
1720267-10 A	gm8260w Full2 QC Navy	7/28/2017 7:00AM		25	25					4
1720267-10 A	g524.2w	7/28/2017 7:00AM		25	25					4
1720267-10 A	g524.2w Full4	7/28/2017 7:00AM		25	25					4
1720267-10 A	g8260w	7/28/2017 7:00AM		25	25					4
1720267-10 A	g8260w Full3	7/28/2017 7:00AM		25	25					4
1720267-10 A	gm8260w Full QC Navy	7/28/2017 7:00AM	MGC	25	25					4
1720267-11 A	gm8260w Full QC Navy	7/28/2017 7:00AM	MGC	25	25					4
1720267-12 A	gm8260w Full2 QC Navy	7/28/2017 7:00AM	MGC	25	25					4
1720267-13 A	gm8260w Full QC Navy	7/28/2017 7:00AM	MGC	25	25					4
1720267-14 A	gm8260w Full QC Navy	7/28/2017 7:00AM	MGC	25	25					4
1720267-15 A	gm8260w Full QC Navy	7/28/2017 7:00AM	MGC	25	25					4
1720282-04 A	g524.2w	7/28/2017 7:00AM	MGC	25	25					4
1720282-05 A	g524.2w	7/28/2017 7:00AM	MGC	25	25					4
1720282-06 A	g524.2w Full4	7/28/2017 7:00AM	MGC	25	25					4
1720284-18 A	g8260w	7/28/2017 7:00AM	MGC	25	25					4
1720284-19 A	g8260w Full3	7/28/2017 7:00AM	MGC	25	25					4



PREPARATION BENCH SHEET

B[G2380]

BC Laboratories

Printed: 8/24/2017 10:33:44AM

Matrix: Water

Prepared using: Volatiles - GC/MS - EPA 5030 Water MS

SurrogateUsed: 7G20041

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
B[G2380-BLK1	QC	7/28/2017 7:00AM	MGC	25	25					4
B[G2380-BS1	QC	7/28/2017 7:00AM	MGC	25	25	7G21007		12.5	4	
B[G2380-MS1	QC	7/28/2017 7:00AM	MGC	25	25	7G21007	1720267-10	12.5	4	
B[G2380-MSD1	QC	7/28/2017 7:00AM	MGC	25	25	7G21007	1720267-10	12.5	4	

Surrogate Mixes	Description	Solvent	Prepared	Expires
7G20041	8260 V5 WORK SURR. STD BATCH	Methanol VRL-15-5590	7/20/2017 by Miguel Chavez	10/20/2017
7G21007	8260 V5 I SPIKE COMBO	meoh	7/20/2017 by Miguel Chavez	10/20/2017



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Sequence Information



ANALYSIS SEQUENCE

1712752

Instrument: MS-V5
Calibration ID: 1707017 Sequence Date: 07/18/2017 Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1712752-TUN1	QC		1		7F24002		
1712752-CAL1	QC		2		7G20044		
1712752-CAL2	QC		3		7G20045		
1712752-CAL3	QC		4		7G20046		
1712752-CAL4	QC		5		7G20047		
1712752-CAL5	QC		6		7G20048		
1712752-CAL6	QC		7		7G20049		
1712752-CAL7	QC		8		7G20056		
1712752-CAL8	QC		9		7G20057		
1712752-CAL9	QC		10		7G20058		
1712752-CALA	QC		11		7G20059		
1712752-CALB	QC		12		7G20060		
1712752-CALC	QC		13		7G20061		
1712752-TUN2	QC		14		7F24002		
1712752-CALD	QC		15		7G20063		
1712752-CALE	QC		16		7G20064		
1712752-CALF	QC		17		7G20065		
1712752-CALG	QC		18		7G20066		
1712752-CALH	QC		19		7G20067		
1712752-CALI	QC		20		7G20068		



ANALYSIS SEQUENCE

1713324

Instrument:	MS-V5						
Calibration ID:	1707017			Sequence Date:	07/28/2017		Printed: 8/24/2017 10:33:44AM
Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713324-ICV1	QC		1		7G20050		
1713324-ICB1	QC		2		7G21006		
1713324-ICV2	QC		3		7G20062		
1713324-ICB2	QC		4		7G21006		
1713324-TUN1	QC		5		7F24002		
1713324-CCV1	QC		6		7G21004		
1713324-CCV2	QC		7		7G21005		
1713324-CCB1	QC		8		7G21006		
1720284-14	g8260w	A	9		7G20040		
1720284-07	g8260w	A	10		7G20040		
1720284-11	g8260w	A	11		7G20040		
1720284-15	g8260w	A	12		7G20040		
1720284-19	g8260w Full3	A	13		7G20040		
1720284-18	g8260w	A	14		7G20040		
1720282-04	g524.2w	A	15		7G20040		
1720282-05	g524.2w	A	16		7G20040		
1720282-06	g524.2w Full4	A	17		7G20040	Bromodichloromethane,Bromoform, Chloroform,Chlor,TH	
1720282-19	g524.2w Full5	A	18			ETBE,TAME,DIPE,MTBE,TBA,11 2-Triclo,n-propylbenzene	
B[G2379-BLK1	QC		19		7G20040		
1720122-05	g8260w	A	20		7G20040	BatchQC	
1720122-05	gm8260w Full QC Navy	A	21		7G20040	Full SAP LIST	
B[G2379-BS1	QC		22		7G20040		
B[G2379-MS1	QC		23		7G20040		
B[G2379-MSD1	QC		24		7G20040		
1720122-01	gm8260w Full QC Navy	A	25		7G20040	Full SAP LIST	
1720122-02	gm8260w Full QC Navy	A	26		7G20040	Full SAP LIST	
1720122-03	gm8260w Full QC Navy	A	27		7G20040	Full SAP LIST	
1720122-04	gm8260w Full QC Navy	A	28		7G20040	Full SAP LIST	
1720122-09	gm8260w Full QC Navy	A	29		7G20040	Full SAP LIST	
1720122-06	gm8260w Full QC Navy	A	30		7G20040	Full SAP LIST	
1720122-07	gm8260w Full QC Navy	A	31		7G20040	Full SAP LIST	
1713324-TUN2	QC		32		7F24002		
1713324-CCV3	QC		33		7G21004		
1713324-CCV4	QC		34		7G21005		
1713324-CCB2	QC		35		7G21006		
1720122-16	gm8260w Full QC Navy	A	36		7G20040	Full SAP LIST	
1720122-15	gm8260w Full QC Navy	A	37		7G20040	Full SAP LIST	
1720122-14	gm8260w Full QC Navy	A	38		7G20040	Full SAP LIST	



ANALYSIS SEQUENCE

1713324

Instrument: MS-V5
Calibration ID: 1707017 Sequence Date: 07/28/2017 Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720122-13	gm8260w Full QC Navy	A	39		7G20040		Full SAP LIST
1720122-12	gm8260w Full QC Navy	A	40		7G20040		Full SAP LIST
1720122-11	gm8260w Full QC Navy	A	41		7G20040		Full SAP LIST
1720122-08	gm8260w Full QC Navy	A	42		7G20040		Full SAP LIST
1720122-10	gm8260w Full QC Navy	A	43		7G20040		Full SAP LIST
1720105-05	g8260w Full	A	44		7G20040		
1720105-05	g8260w TICs	A	45		7G20040		
1720105-04	g8260w Full	A	46		7G20040		
1720105-04	g8260w TICs	A	47		7G20040		
1720105-03	g8260w Full	A	48		7G20040		
1720105-03	g8260w TICs	A	49		7G20040		
1720105-02	g8260w Full	A	50		7G20040		
1720105-02	g8260w TICs	A	51		7G20040		
1720105-01	g8260w Full	A	52		7G20040		
1720105-01	g8260w TICs	A	53		7G20040		
1720267-01	gm8260w Full QC Navy	A	54		7G20040		Full SAP LIST
1720267-02	gm8260w Full QC Navy	A	55		7G20040		Full SAP LIST
1720267-03	gm8260w Full QC Navy	A	56		7G20040		Full SAP LIST
1720267-04	gm8260w Full QC Navy	A	57		7G20040		Full SAP LIST
1720267-05	gm8260w Full QC Navy	A	58		7G20040		Full SAP LIST
1720267-06	gm8260w Full QC Navy	A	59		7G20040		Full SAP LIST
1720267-07	gm8260w Full QC Navy	A	60		7G20040		Full SAP LIST
1720267-08	gm8260w Full QC Navy	A	61		7G20040		Full SAP LIST
1720267-09	gm8260w Full QC Navy	A	62		7G20040		Full SAP LIST
1720267-11	gm8260w Full QC Navy	A	63		7G20040		Full SAP LIST
1713324-TUN3	QC		64		7F24002		
1713324-CCV5	QC		65		7G21004		
1713324-CCV6	QC		66		7G21005		
1713324-CCB3	QC		67		7G21006		
B[G2380-BLK1]	QC		68		7G20040		
1720267-10	g524.2w	A	69		7G20040		BatchQC
1720267-10	g524.2w Full4	A	70		7G20040		BatchQC
1720267-10	g8260w	A	71		7G20040		BatchQC
1720267-10	g8260w Full3	A	72		7G20040		BatchQC
1720267-10	gm8260w Full QC Navy	A	73		7G20040		Full SAP LIST
1720267-10	gm8260w Full2 QC Navy	A	74		7G20040		BatchQC
1720267-12	gm8260w Full2 QC Navy	A	75		7G20040		short list - Benzene & Ethylbenzen only
1720267-13	gm8260w Full QC Navy	A	76		7G20040		Full SAP LIST



ANALYSIS SEQUENCE

1713324

Instrument: MS-V5

Calibration ID: 1707017

Sequence Date: 07/28/2017

Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720267-14	gm8260w Full QC Navy	A	77		7G20040		Full SAP LIST
1720267-15	gm8260w Full QC Navy	A	78		7G20040		Full SAP LIST
B[G2380-BS1]	QC		79		7G20040		
B[G2380-MS1]	QC		80		7G20040		
B[G2380-MSD1]	QC		81		7G20040		
1720122-06RE1	gm8260w Full QC Navy	B	82		7G20040		Full SAP LIST
1720122-07RE1	gm8260w Full QC Navy	D	83		7G20040		Full SAP LIST
1720122-11RE1	gm8260w Full QC Navy	B	84		7G20040		Full SAP LIST
1720122-08RE1	gm8260w Full QC Navy	B	85		7G20040		Full SAP LIST
1720122-10RE1	gm8260w Full QC Navy	B	86		7G20040		Full SAP LIST
1713324-TUN4	QC		87		7F24002		
1713324-CCV7	QC		88		7G21004		
1713324-CCV8	QC		89		7G21005		
1713324-CCB4	QC		90		7G21006		



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG: 17-20267

Class: WET

Method: EPA-160.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSES DATA PACKAGE COVER PAGE**EPA-160.1**

Laboratory: BC Laboratories

SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Client Sample Id:26PZ01_17072426PZ02_17072426PZ03_170724**Lab Sample Id:**1720267-011720267-021720267-03

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature:

Name:

Sara Guron

Date:

08-24-2017

Title:

QA/QC Manager



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS**EPA-160.1****Laboratory:** BC Laboratories**SDG:** 17-20267**Client:** AMEC Environmental & Infrastructure- \$AMCN**Project:** Alameda**Matrix:** Water**Instrument:** MANUAL

Analyte	DL	LOD	LOQ	Units
Total Dissolved Solids @ 180 C	10	10	10	mg/L



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-160.1

26PZ01_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-01 File ID:
Sampled: 07/24/17 11:16 Prepared: 07/28/17 11:00 Analyzed: 07/28/17 11:00
Solids: 0.00 Preparation: No Prep Initial/Final: 100 ml / 100 ml
Batch: B[G2377 Sequence: 1713585 Calibration: UNASSIGNED Instrument: MANUAL

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Total Dissolved Solids @ 180 C	16000	1000	1000	1000	100	D	EPA-160.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**INORGANIC ANALYSIS DATA SHEET
EPA-160.1****26PZ02_170724**Laboratory: BC LaboratoriesSDG: 17-20267Client: AMEC Environmental & Infrastructure- \$AMCNProject: AlamedaMatrix: WaterLaboratory ID: 1720267-02

File ID:

Sampled: 07/24/17 10:23Prepared: 07/28/17 11:00Analyzed: 07/28/17 11:00Solids: 0.00Preparation: No PrepInitial/Final: 100 ml / 100 mlBatch: B[G2377Sequence: 1713585Calibration: UNASSIGNEDInstrument: MANUAL

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Total Dissolved Solids @ 180 C	10000	500	500	500	50	D	EPA-160.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**INORGANIC ANALYSIS DATA SHEET
EPA-160.1****26PZ03_170724**Laboratory: BC LaboratoriesSDG: 17-20267Client: AMEC Environmental & Infrastructure- \$AMCNProject: AlamedaMatrix: WaterLaboratory ID: 1720267-03

File ID:

Sampled: 07/24/17 12:05Prepared: 07/28/17 11:00Analyzed: 07/28/17 11:00Solids: 0.00Preparation: No PrepInitial/Final: 100 ml / 100 mlBatch: B[G2377Sequence: 1713585Calibration: UNASSIGNEDInstrument: MANUAL

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Total Dissolved Solids @ 180 C	15000	1000	1000	1000	100	D	EPA-160.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

PREPARATION BATCH SUMMARY**EPA-160.1**

Laboratory: BC Laboratories SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Batch: B[G2377 Batch Matrix: Water Preparation: No Prep

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
26PZ01_170724	1720267-01		07/28/17 11:00	
26PZ02_170724	1720267-02		07/28/17 11:00	
26PZ03_170724	1720267-03		07/28/17 11:00	
Blank	B[G2377-BLK1		07/28/17 11:00	
LCS	B[G2377-BS1		07/28/17 11:00	
Duplicate	B[G2377-DUP1		07/28/17 11:00	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

**METHOD BLANK DATA SHEET
EPA-160.1**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: B[G2377-BLK1 File ID:
Prepared: 07/28/17 11:00 Preparation: No Prep Initial/Final: 100 ml / 100 ml
Analyzed: 07/28/17 11:00 Instrument: MANUAL
Batch: B[G2377 Sequence: 1713585 Calibration: UNASSIGNED

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
---	Total Dissolved Solids @ 180 C	6.7	6.7	6.7	6.7	UD



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

DUPLICATES

[Duplicate](#)

EPA-160.1

Laboratory: BC LaboratoriesSDG: 17-20267Client: AMEC Environmental & Infrastructure- \$AMCNProject: AlamedaMatrix: WaterLaboratory ID: B[G2377-DUP1Batch: B[G2377Lab Source ID: 1720225-02Preparation: No PrepInitial/Final: 100 ml / 100 mlSource Sample Name: Duplicate

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/L)	C	DUPLICATE CONCENTRATION (mg/L)	C	RPD %	Q	METHOD
Total Dissolved Solids @ 180 C	10	670.00		640.00		4.58		EPA-160.1

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

LCS RECOVERY**EPA-160.1**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water
Batch: B[G2377 Laboratory ID: B[G2377-BS1
Preparation: No Prep Initial/Final: 20 ml / 20 ml

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC. #	QC LIMITS REC.
Total Dissolved Solids @ 180 C	586.00	550.00	93.9	90 - 110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY EPA-160.1

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1713585 Instrument: MANUAL
Matrix: Water Calibration: UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Blank	B[G2377-BLK1]		07/28/17 11:00
LCS	B[G2377-BS1]		07/28/17 11:00
Duplicate	B[G2377-DUP1]		07/28/17 11:00
26PZ01_170724	1720267-01		07/28/17 11:00
26PZ02_170724	1720267-02		07/28/17 11:00
26PZ03_170724	1720267-03		07/28/17 11:00



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

HOLDING TIME SUMMARY**EPA-160.1**

Laboratory: BC Laboratories SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
26PZ01_170724	07/24/17 11:16	07/24/17 21:40	07/28/17 11:00	4.00	7.00	07/28/17 11:00	4.00	7.00	
26PZ02_170724	07/24/17 10:23	07/24/17 21:40	07/28/17 11:00	4.00	7.00	07/28/17 11:00	4.00	7.00	
26PZ03_170724	07/24/17 12:05	07/24/17 21:40	07/28/17 11:00	4.00	7.00	07/28/17 11:00	4.00	7.00	

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data From Instrument MANUAL



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Batch Information



PREPARATION BENCH SHEET

B[G2377]

BC Laboratories

Printed: 8/24/2017 10:33:44AM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720118-01 D	i160.1w TDS	7/28/2017 11:00AM	CAD	100	100					
1720177-01 G	i160.1w TDS	7/28/2017 11:00AM	CAD	100	100					
1720225-02 A	iSM2540Cw TDS	7/28/2017 11:00AM	CAD	100	100					
1720225-02 A	i160.1w TDS	7/28/2017 11:00AM	CAD	100	100					
1720235-01 D	iSM2540Cw TDS	7/28/2017 11:00AM	CAD	100	100					
1720235-02 D	iSM2540Cw TDS	7/28/2017 11:00AM	CAD	100	100					
1720235-03 D	iSM2540Cw TDS	7/28/2017 11:00AM	CAD	100	100					
1720267-01 D	i160.1w TDS	7/28/2017 11:00AM	CAD	100	100					
1720267-02 D	i160.1w TDS	7/28/2017 11:00AM	CAD	100	100					
1720267-03 D	i160.1w TDS	7/28/2017 11:00AM	CAD	100	100					
1720315-01 D	iSM2540Cw TDS	7/28/2017 11:00AM	CAD	100	100					
B[G2377-BLK1]	QC	7/28/2017 11:00AM	CAD	100	100					
B[G2377-BS1]	QC	7/28/2017 11:00AM	CAD	20	20	7F28063		20000		
B[G2377-DUP1]	QC	7/28/2017 11:00AM	CAD	100	100		1720225-02			

Spike Mixes	Description	Solvent	Prepared	Expires
7F28063	TDS LCSW WORKING	H2O (DI)	6/28/2017 by Carla De la Torre	12/28/2017



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Sequence Information



ANALYSIS SEQUENCE

1713585

Instrument: MANUAL

Calibration ID: Sequence Date: 07/28/2017

Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
B[G2376-BLK1]	QC		1				
B[G2377-BLK1]	QC		2				
B[G2376-BS1]	QC		3				
1720119-01	i160.1w TDS	D	4				
1720119-01	iSM2540Cw TDS	D	4				BatchQC
B[G2376-DUP1]	QC		5				
1720120-01	i160.1w TDS	D	6				
1720154-01	i160.1w TDS	D	7				
1720154-02	i160.1w TDS	D	8				
1720154-03	i160.1w TDS	D	9				
1720154-04	i160.1w TDS	D	10				
1720155-01	iSM2540Cw TDS	A	11				
1720155-02	iSM2540Cw TDS	A	12				
1720182-01	iSM2540Cw TDS	A	13				
1720182-02	iSM2540Cw TDS	A	14				
B[G2377-BS1]	QC		15				
1720225-02	i160.1w TDS	A	16				BatchQC
1720225-02	iSM2540Cw TDS	A	16				
B[G2377-DUP1]	QC		17				
1720118-01	i160.1w TDS	D	18				
1720177-01	i160.1w TDS	G	19				
1720235-01	iSM2540Cw TDS	D	20				
1720235-02	iSM2540Cw TDS	D	21				
1720235-03	iSM2540Cw TDS	D	22				
1720267-01	i160.1w TDS	D	23				
1720267-02	i160.1w TDS	D	24				
1720267-03	i160.1w TDS	D	25				
1720315-01	iSM2540Cw TDS	D	26				

Solids Logbook

W-TDS-ALL W-TOTAL-SOLIDS-ALL VOLATILES

Run#	Date	Time	Analyst:	QC #1 RPD	QC #2 RPD	Reviewed by:	LCSW ID	Batch #	Batch #	Oven #	Oven Temp.
D01	07/18/18	11:12									
		11:00	PQL: 10 mg/l								
			Balance #	125							
Samp. #	Lab ID #		EC	mls	Beg. wt. #1	#2		Final Wt. #1	#2	#3	#4
F1	0511		150	1.9190				1.9194	1.8187		
LCSW F2	0521		20	1.8084				1.8204	1.8203		
F3	20119 - 01 A		4093	5	1.8343			1.8671	1.8650	1.8630	
1. DIP	0529		4093	5	1.8328			1.8664	1.8641	1.8620	
1. DIP	20120 - 01 B		9	150	103.5868			103.5880	103.5874		
2. F5	20154 - 01 A		18150	2	1.8269			1.8546	1.8542		
3. F6	20154 - 01 A		6880	5	1.8321			1.8600	1.8595		
4. FT	0219		15050	2	1.8153			1.8359	1.8340		
5. FT	0310		15050	2	1.8285			1.8447	1.8442		
6. F9	0410		21440	1	1.8285			90.3659	90.3781		
7. F10	20155 - 01 A		178	150	90.3659			1.8447	1.8442		
8. F11	0214		2747	10	1.8224			1.8281	1.8280		
9. F12	20182 - 01 A		1182	20	1.8119			1.8528	1.8528		
10. F13	0214		1232	20	1.8220			1.8202	1.8201		
11. F14	0212		1175	20	1.8091			1.8238	1.8238		
12. F15	20115 - 02 A		1175	20	1.8104			1.8259	1.8257		
13. F16	0209		1175	20	1.8109			1.8403	1.8400		
14. F17	20118 - 01 A		671	50	1.8171			1.8449	1.8446		
15. F18	20177 - 01 A		755	30	1.8320			1.8367	1.8362		
16. F19	20235 - 01 A		21130	1	1.8223			1.8320	1.8318		
17. F20	0219		23635	1	1.8164			1.8354	1.8349		
18. F21	0310		22250	1	1.8208			1.8393	1.8393		
19. F22	20167 - 01 A		26010	1	1.8229			1.8436	1.8432		
20. F23	0219		16280	2	1.8224			1.8359	1.8358		
			24340	1	1.8211						
			1574	20	1.8350						
			1525	10	1.8350						

BC LABORATORIES, INC.

Balance # 25	PDL # 10	Type: Analytical # 8
Made: Mettler Toledo		
Serial: 1128300138		

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
0.100358																															
0.100448																															
0.100358																															
0.100248																															
0.100148																															
0.100048																															
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199.998848																															
199.998748																															
199.998648																															

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
INIT	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11

UPPER CONTROL LIMIT: 0.1005g
 LOWER CONTROL LIMIT: 0.0995g

UPPER CONTROL LIMIT: 200.0005g
 LOWER CONTROL LIMIT: 199.9995g

Page 12 of 12

Note: This balance is monitor on weekends. Check list on back of logbook.

Note: Used 100mg = 0.1g (Acceptance Limit between 0.1005g and 0.0995g)



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG: 17-20267

Class: WET

Method: EPA-300.0



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSES DATA PACKAGE COVER PAGE**EPA-300.0**

Laboratory: BC Laboratories

SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Client Sample Id:	Lab Sample Id:
<u>26PZ01_170724</u>	<u>1720267-01</u>
<u>26PZ01_170724</u>	<u>1720267-01RE1</u>
<u>26PZ02_170724</u>	<u>1720267-02</u>
<u>26PZ02_170724</u>	<u>1720267-02RE1</u>
<u>26PZ03_170724</u>	<u>1720267-03</u>
<u>26PZ03_170724</u>	<u>1720267-03RE1</u>
<u>27EW-01_170724</u>	<u>1720267-04</u>
<u>27MW06_170724</u>	<u>1720267-08</u>
<u>27MW07_170724</u>	<u>1720267-09</u>
<u>27MW08_170724</u>	<u>1720267-10</u>
<u>27MW09_170724</u>	<u>1720267-11</u>

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature:

Name:

Sara Guron

Date:

08-24-2017

Title:

QA/QC Manager



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS**EPA-300.0****Laboratory:** BC Laboratories**SDG:** 17-20267**Client:** AMEC Environmental & Infrastructure- \$AMCN**Project:** Alameda**Matrix:** Water**Instrument:** IC5

Analyte	DL	LOD	LOQ	Units
Chloride	0.077	0.1	0.5	mg/L
Nitrate as NO ₃	0.092	0.23	0.44	mg/L
Nitrate as N	0.021	0.05	0.1	mg/L
Sulfate	0.13	0.2	1	mg/L



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-300.0

26PZ01_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-01 File ID: E072517.seq-08
Sampled: 07/24/17 11:16 Prepared: 07/25/17 12:00 Analyzed: 07/25/17 13:48
Solids: 0.00 Preparation: No Prep Initial/Final: 20 ml / 20 ml
Batch: B[G2045 Sequence: 1713206 Calibration: UNASSIGNED Instrument: IC5

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
14797-55-8	Nitrate as N	1.0	0.42	1.0	2.0	20	UD	EPA-300.0
14808-79-8	Sulfate	47	2.6	4.0	20	20	D	EPA-300.0



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-300.0

26PZ01_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-01RE1 File ID: E072517.seq-22
Sampled: 07/24/17 11:16 Prepared: 07/25/17 12:00 Analyzed: 07/25/17 17:58
Solids: 0.00 Preparation: No Prep Initial/Final: 20 ml / 20 ml
Batch: B[G2045 Sequence: 1713206 Calibration: UNASSIGNED Instrument: IC5

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
16887-00-6	Chloride	8900	3.8	5.0	25	50	D	EPA-300.0



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-300.0

26PZ02_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-02 File ID: E072517.seq-12
Sampled: 07/24/17 10:23 Prepared: 07/25/17 12:00 Analyzed: 07/25/17 14:59
Solids: 0.00 Preparation: No Prep Initial/Final: 20 ml / 20 ml
Batch: B[G2045 Sequence: 1713206 Calibration: UNASSIGNED Instrument: IC5

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
14797-55-8	Nitrate as N	1.0	0.42	1.0	2.0	20	UD	EPA-300.0
14808-79-8	Sulfate	74	2.6	4.0	20	20	D	EPA-300.0



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**INORGANIC ANALYSIS DATA SHEET
EPA-300.0****26PZ02_170724**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-02RE1 File ID: E072517.seq-26
Sampled: 07/24/17 10:23 Prepared: 07/25/17 12:00 Analyzed: 07/25/17 19:10
Solids: 0.00 Preparation: No Prep Initial/Final: 20 ml / 20 ml
Batch: B[G2045 Sequence: 1713206 Calibration: UNASSIGNED Instrument: IC5

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
16887-00-6	Chloride	5300	3.8	5.0	25	50	D	EPA-300.0



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-300.0

26PZ03_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-03 File ID: E072517.seq-13
Sampled: 07/24/17 12:05 Prepared: 07/25/17 12:00 Analyzed: 07/25/17 15:17
Solids: 0.00 Preparation: No Prep Initial/Final: 20 ml / 20 ml
Batch: B[G2045 Sequence: 1713206 Calibration: UNASSIGNED Instrument: IC5

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
14797-55-8	Nitrate as N	1.0	0.42	1.0	2.0	20	UD	EPA-300.0
14808-79-8	Sulfate	27	2.6	4.0	20	20	D	EPA-300.0



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-300.0

26PZ03_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-03RE1 File ID: E072517.seq-27
Sampled: 07/24/17 12:05 Prepared: 07/25/17 12:00 Analyzed: 07/25/17 19:28
Solids: 0.00 Preparation: No Prep Initial/Final: 20 ml / 20 ml
Batch: B[G2045 Sequence: 1713206 Calibration: UNASSIGNED Instrument: IC5

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
16887-00-6	Chloride	8300	3.8	5.0	25	50	D	EPA-300.0



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-300.0

27EW-01_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-04 File ID: E072517.seq-14
Sampled: 07/24/17 13:45 Prepared: 07/25/17 12:00 Analyzed: 07/25/17 15:35
Solids: 0.00 Preparation: No Prep Initial/Final: 20 ml / 20 ml
Batch: B[G2045 Sequence: 1713206 Calibration: UNASSIGNED Instrument: IC5

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
16887-00-6	Chloride	55	0.38	0.50	2.5	5	D	EPA-300.0
14797-55-8	Nitrate as N	0.25	0.10	0.25	0.50	5	UD	EPA-300.0
14808-79-8	Sulfate	1000	0.65	1.0	5.0	5	D	EPA-300.0



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-300.0

27MW06_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-08 File ID: E072517.seq-15
Sampled: 07/24/17 09:00 Prepared: 07/25/17 12:00 Analyzed: 07/25/17 15:53
Solids: 0.00 Preparation: No Prep Initial/Final: 20 ml / 20 ml
Batch: B[G2045 Sequence: 1713206 Calibration: UNASSIGNED Instrument: IC5

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
16887-00-6	Chloride	3.3	0.077	0.10	0.50	1		EPA-300.0
14797-55-8	Nitrate as N	0.41	0.021	0.050	0.10	1		EPA-300.0
14808-79-8	Sulfate	3.8	0.13	0.20	1.0	1		EPA-300.0



AMEC Environmental & Infrastructure-
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Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**INORGANIC ANALYSIS DATA SHEET
EPA-300.0****27MW07_170724**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-09 File ID: E072517.seq-18
Sampled: 07/24/17 10:30 Prepared: 07/25/17 12:00 Analyzed: 07/25/17 16:47
Solids: 0.00 Preparation: No Prep Initial/Final: 20 ml / 20 ml
Batch: B[G2045 Sequence: 1713206 Calibration: UNASSIGNED Instrument: IC5

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
16887-00-6	Chloride	4.6	0.077	0.10	0.50	1		EPA-300.0
14797-55-8	Nitrate as N	0.12	0.021	0.050	0.10	1		EPA-300.0
14808-79-8	Sulfate	120	0.13	0.20	1.0	1		EPA-300.0



AMEC Environmental & Infrastructure-
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Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-300.0

27MW08_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-10 File ID: E072517.seq-19
Sampled: 07/24/17 08:20 Prepared: 07/25/17 12:00 Analyzed: 07/25/17 17:04
Solids: 0.00 Preparation: No Prep Initial/Final: 20 ml / 20 ml
Batch: B[G2045 Sequence: 1713206 Calibration: UNASSIGNED Instrument: IC5

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
16887-00-6	Chloride	36	0.077	0.10	0.50	1		EPA-300.0
14797-55-8	Nitrate as N	0.47	0.021	0.050	0.10	1		EPA-300.0
14808-79-8	Sulfate	65	0.13	0.20	1.0	1		EPA-300.0



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-300.0

27MW09_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-11 File ID: E072517.seq-20
Sampled: 07/24/17 12:55 Prepared: 07/25/17 12:00 Analyzed: 07/25/17 17:22
Solids: 0.00 Preparation: No Prep Initial/Final: 20 ml / 20 ml
Batch: B[G2045 Sequence: 1713206 Calibration: UNASSIGNED Instrument: IC5

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
16887-00-6	Chloride	3600	1.5	2.0	10	20	D	EPA-300.0
14797-55-8	Nitrate as N	1.0	0.42	1.0	2.0	20	UD	EPA-300.0
14808-79-8	Sulfate	450	2.6	4.0	20	20	D	EPA-300.0



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

PREPARATION BATCH SUMMARY**EPA-300.0**

Laboratory: BC Laboratories SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Batch: B[G2045 Batch Matrix: Water Preparation: No Prep

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
26PZ01_170724	1720267-01	E072517.seq-08	07/25/17 12:00	
26PZ01_170724	1720267-01RE1	E072517.seq-22	07/25/17 12:00	Added 7/26/2017 by JSW
26PZ02_170724	1720267-02	E072517.seq-12	07/25/17 12:00	
26PZ02_170724	1720267-02RE1	E072517.seq-26	07/25/17 12:00	Added 7/26/2017 by JSW
26PZ03_170724	1720267-03	E072517.seq-13	07/25/17 12:00	
26PZ03_170724	1720267-03RE1	E072517.seq-27	07/25/17 12:00	Added 7/26/2017 by JSW
27EW-01_170724	1720267-04	E072517.seq-14	07/25/17 12:00	
27MW06_170724	1720267-08	E072517.seq-15	07/25/17 12:00	
27MW07_170724	1720267-09	E072517.seq-18	07/25/17 12:00	
27MW08_170724	1720267-10	E072517.seq-19	07/25/17 12:00	
27MW09_170724	1720267-11	E072517.seq-20	07/25/17 12:00	
Blank	B[G2045-BLK1	E072517.seq-06	07/25/17 12:00	
LCS	B[G2045-BS1	E072517.seq-07	07/25/17 12:00	
26PZ01_170724	B[G2045-DUP1	E072517.seq-23	07/25/17 12:00	
26PZ01_170724	B[G2045-MS1	E072517.seq-24	07/25/17 12:00	
26PZ01_170724	B[G2045-MSD1	E072517.seq-25	07/25/17 12:00	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD BLANK DATA SHEET EPA-300.0

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: B[G2045-BLK1 File ID: E072517.seq-06
Prepared: 07/25/17 12:00 Preparation: No Prep Initial/Final: 20 ml / 20 ml
Analyzed: 07/25/17 13:12 Instrument: IC5
Batch: B[G2045 Sequence: 1713206 Calibration: UNASSIGNED

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
16887-00-6	Chloride	0.10	0.077	0.10	0.50	U
14797-55-8	Nitrate as N	0.050	0.021	0.050	0.10	U
14808-79-8	Sulfate	0.20	0.13	0.20	1.0	U



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

DUPLICATES

EPA-300.0

26PZ01 170724

Laboratory: BC Laboratories

SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Matrix: Water

Laboratory ID: B[G2045-DUP1

Batch: B[G2045

Lab Source ID: 1720267-01RE1

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Source Sample Name: 26PZ01_170724

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/L)	C	DUPLICATE CONCENTRATION (mg/L)	C	RPD %	Q	METHOD
Chloride	10	8892.0		8911.5		0.218		EPA-300.0
Nitrate as NO ₃	10	0.0000		ND				EPA-300.0
Nitrate as N	10	0.0000		ND				EPA-300.0
Sulfate	10	50.350		47.850		5.09		EPA-300.0

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-300.0

26PZ01 170724

Laboratory: BC Laboratories SDG: 17-20267Client: AMEC Environmental & Infrastructure- \$AMCN Project: AlamedaMatrix: WaterBatch: B|G2045 Laboratory ID: B|G2045-MS1Preparation: No Prep Initial/Final: 19.8 ml / 20 mlSource Sample Number: 1720267-01RE1

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC. #	QC LIMITS REC.
Chloride	2525.3	8892.0	11134	88.8	80 - 120
Nitrate as NO3	1117.9	ND	1113.0	99.6	80 - 120
Nitrate as N	252.53	ND	251.41	99.6	80 - 120
Sulfate	5050.5	50.350	5039.8	98.8	80 - 120

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC. #	% RPD #	RPD	QC LIMITS REC.
Chloride	2525.3	11147	89.3	0.123	10	80 - 120
Nitrate as NO3	1117.9	1117.0	99.9	0.361	10	80 - 120
Nitrate as N	252.53	252.32	99.9	0.361	10	80 - 120
Sulfate	5050.5	5048.3	99.0	0.168	10	80 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

LCS RECOVERY**EPA-300.0**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water
Batch: B[G2045 Laboratory ID: B[G2045-BS1
Preparation: No Prep Initial/Final: 20 ml / 20 ml

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC. #	QC LIMITS REC.
Chloride	50.000	51.021	102	90 - 110
Nitrate as NO ₃	22.134	22.617	102	90 - 110
Nitrate as N	5.0000	5.1090	102	90 - 110
Sulfate	100.00	101.10	101	90 - 110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY EPA-300.0

Laboratory:	<u>BC Laboratories</u>	SDG:	<u>17-20267</u>
Client:	<u>AMEC Environmental & Infrastructure- \$AMCN</u>	Project:	<u>Alameda</u>
Sequence:	<u>1713206</u>	Instrument:	<u>IC5</u>
Matrix:	<u>Water</u>	Calibration:	<u>UNASSIGNED</u>

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	1713206-ICV1	E072517.seq-04	07/25/17 12:36
Initial Cal Blank	1713206-ICB1	E072517.seq-05	07/25/17 12:54
Blank	B[G2045-BLK1	E072517.seq-06	07/25/17 13:12
LCS	B[G2045-BS1	E072517.seq-07	07/25/17 13:30
26PZ01_170724	1720267-01	E072517.seq-08	07/25/17 13:48
26PZ02_170724	1720267-02	E072517.seq-12	07/25/17 14:59
26PZ03_170724	1720267-03	E072517.seq-13	07/25/17 15:17
27EW-01_170724	1720267-04	E072517.seq-14	07/25/17 15:35
27MW06_170724	1720267-08	E072517.seq-15	07/25/17 15:53
Calibration Check	1713206-CCV1	E072517.seq-16	07/25/17 16:11
Calibration Blank	1713206-CCB1	E072517.seq-17	07/25/17 16:29
27MW07_170724	1720267-09	E072517.seq-18	07/25/17 16:47
27MW08_170724	1720267-10	E072517.seq-19	07/25/17 17:04
27MW09_170724	1720267-11	E072517.seq-20	07/25/17 17:22
26PZ01_170724	1720267-01RE1	E072517.seq-22	07/25/17 17:58
26PZ01_170724	B[G2045-DUP1	E072517.seq-23	07/25/17 18:16
26PZ01_170724	B[G2045-MS1	E072517.seq-24	07/25/17 18:34
26PZ01_170724	B[G2045-MSD1	E072517.seq-25	07/25/17 18:52
26PZ02_170724	1720267-02RE1	E072517.seq-26	07/25/17 19:10
26PZ03_170724	1720267-03RE1	E072517.seq-27	07/25/17 19:28
Calibration Check	1713206-CCV2	E072517.seq-28	07/25/17 19:45
Calibration Blank	1713206-CCB2	E072517.seq-29	07/25/17 20:03
Calibration Check	1713206-CCV3	E072517.seq-33	07/25/17 21:15
Calibration Blank	1713206-CCB3	E072517.seq-34	07/25/17 21:33



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

**BLANKS
EPA-300.0**Laboratory: BC LaboratoriesSDG: 17-20267Client: AMEC Environmental & Infrastructure- \$AMCNInstrument ID: IC5Project: AlamedaSequence: 1713206Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	DL	LOD	LOQ	Units	C	Method
1713206-ICB1	Chloride	0.0000	0.077		0.50	mg/L	U	EPA-300.0
	Nitrate as NO ₃	0.0000	0.092		0.44	mg/L	U	EPA-300.0
	Nitrate as N	0.0000	0.021		0.10	mg/L	U	EPA-300.0
	Sulfate	0.0000	0.13		1.0	mg/L	U	EPA-300.0
1713206-CCB1	Chloride	0.0000	0.077		0.50	mg/L	U	EPA-300.0
	Nitrate as NO ₃	0.0000	0.092		0.44	mg/L	U	EPA-300.0
	Nitrate as N	0.0000	0.021		0.10	mg/L	U	EPA-300.0
	Sulfate	0.0000	0.13		1.0	mg/L	U	EPA-300.0
1713206-CCB2	Chloride	0.0000	0.077		0.50	mg/L	U	EPA-300.0
	Nitrate as NO ₃	0.0000	0.092		0.44	mg/L	U	EPA-300.0
	Nitrate as N	0.0000	0.021		0.10	mg/L	U	EPA-300.0
	Sulfate	0.0000	0.13		1.0	mg/L	U	EPA-300.0
1713206-CCB3	Chloride	0.0000	0.077		0.50	mg/L	U	EPA-300.0
	Nitrate as NO ₃	0.0000	0.092		0.44	mg/L	U	EPA-300.0
	Nitrate as N	0.0000	0.021		0.10	mg/L	U	EPA-300.0
	Sulfate	0.0000	0.13		1.0	mg/L	U	EPA-300.0



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL AND CONTINUING CALIBRATION CHECK**EPA-300.0**Laboratory: BC LaboratoriesSDG: 17-20267Client: AMEC Environmental & Infrastructure- \$AMCNProject: AlamedaInstrument ID: IC5Calibration: UNASSIGNEDControl Limt: +/- 10.00%Sequence: 1713206

Lab Sample ID	Analyte	True	Found	%R	Units	Method
1713206-ICV1	Chloride	50.000	49.035	98.1	mg/L	EPA-300.0
	Nitrate as NO ₃	22.134	21.957	99.2	mg/L	EPA-300.0
	Nitrate as N	5.0000	4.9600	99.2	mg/L	EPA-300.0
	Sulfate	100.00	96.275	96.3	mg/L	EPA-300.0
1713206-CCV1	Chloride	50.000	48.903	97.8	mg/L	EPA-300.0
	Nitrate as NO ₃	22.134	21.554	97.4	mg/L	EPA-300.0
	Nitrate as N	5.0000	4.8690	97.4	mg/L	EPA-300.0
	Sulfate	100.00	96.932	96.9	mg/L	EPA-300.0
1713206-CCV2	Chloride	50.000	49.363	98.7	mg/L	EPA-300.0
	Nitrate as NO ₃	22.134	21.736	98.2	mg/L	EPA-300.0
	Nitrate as N	5.0000	4.9100	98.2	mg/L	EPA-300.0
	Sulfate	100.00	97.706	97.7	mg/L	EPA-300.0
1713206-CCV3	Chloride	50.000	49.185	98.4	mg/L	EPA-300.0
	Nitrate as NO ₃	22.134	21.851	98.7	mg/L	EPA-300.0
	Nitrate as N	5.0000	4.9360	98.7	mg/L	EPA-300.0
	Sulfate	100.00	97.554	97.6	mg/L	EPA-300.0

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

HOLDING TIME SUMMARY**EPA-300.0**

Laboratory: BC Laboratories SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
26PZ01_170724	07/24/17 11:16	07/24/17 21:40	07/25/17 12:00	1.00	28.00	07/25/17 13:48	1.00	28.00	
26PZ01_170724	07/24/17 11:16	07/24/17 21:40	07/25/17 12:00	1.11	2.00	07/25/17 13:48	1.11	2.00	
26PZ01_170724	07/24/17 11:16	07/24/17 21:40	07/25/17 12:00	1.00	28.00	07/25/17 17:58	1.00	28.00	
26PZ02_170724	07/24/17 10:23	07/24/17 21:40	07/25/17 12:00	1.19	2.00	07/25/17 14:59	1.19	2.00	
26PZ02_170724	07/24/17 10:23	07/24/17 21:40	07/25/17 12:00	1.00	28.00	07/25/17 14:59	1.00	28.00	
26PZ02_170724	07/24/17 10:23	07/24/17 21:40	07/25/17 12:00	1.00	28.00	07/25/17 19:10	1.00	28.00	
26PZ03_170724	07/24/17 12:05	07/24/17 21:40	07/25/17 12:00	1.13	2.00	07/25/17 15:17	1.13	2.00	
26PZ03_170724	07/24/17 12:05	07/24/17 21:40	07/25/17 12:00	1.00	28.00	07/25/17 15:17	1.00	28.00	
26PZ03_170724	07/24/17 12:05	07/24/17 21:40	07/25/17 12:00	1.00	28.00	07/25/17 19:28	1.00	28.00	
27EW-01_170724	07/24/17 13:45	07/24/17 21:40	07/25/17 12:00	1.00	28.00	07/25/17 15:35	1.00	28.00	
27EW-01_170724	07/24/17 13:45	07/24/17 21:40	07/25/17 12:00	1.08	2.00	07/25/17 15:35	1.08	2.00	
27MW06_170724	07/24/17 09:00	07/24/17 21:40	07/25/17 12:00	1.29	2.00	07/25/17 15:53	1.29	2.00	
27MW06_170724	07/24/17 09:00	07/24/17 21:40	07/25/17 12:00	1.00	28.00	07/25/17 15:53	1.00	28.00	
27MW07_170724	07/24/17 10:30	07/24/17 21:40	07/25/17 12:00	1.26	2.00	07/25/17 16:47	1.26	2.00	
27MW07_170724	07/24/17 10:30	07/24/17 21:40	07/25/17 12:00	1.00	28.00	07/25/17 16:47	1.00	28.00	
27MW08_170724	07/24/17 08:20	07/24/17 21:40	07/25/17 12:00	1.36	2.00	07/25/17 17:04	1.36	2.00	
27MW08_170724	07/24/17 08:20	07/24/17 21:40	07/25/17 12:00	1.00	28.00	07/25/17 17:04	1.00	28.00	
27MW09_170724	07/24/17 12:55	07/24/17 21:40	07/25/17 12:00	1.00	28.00	07/25/17 17:22	1.00	28.00	
27MW09_170724	07/24/17 12:55	07/24/17 21:40	07/25/17 12:00	1.19	2.00	07/25/17 17:22	1.19	2.00	



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data From Instrument IC5



Laboratories, Inc.

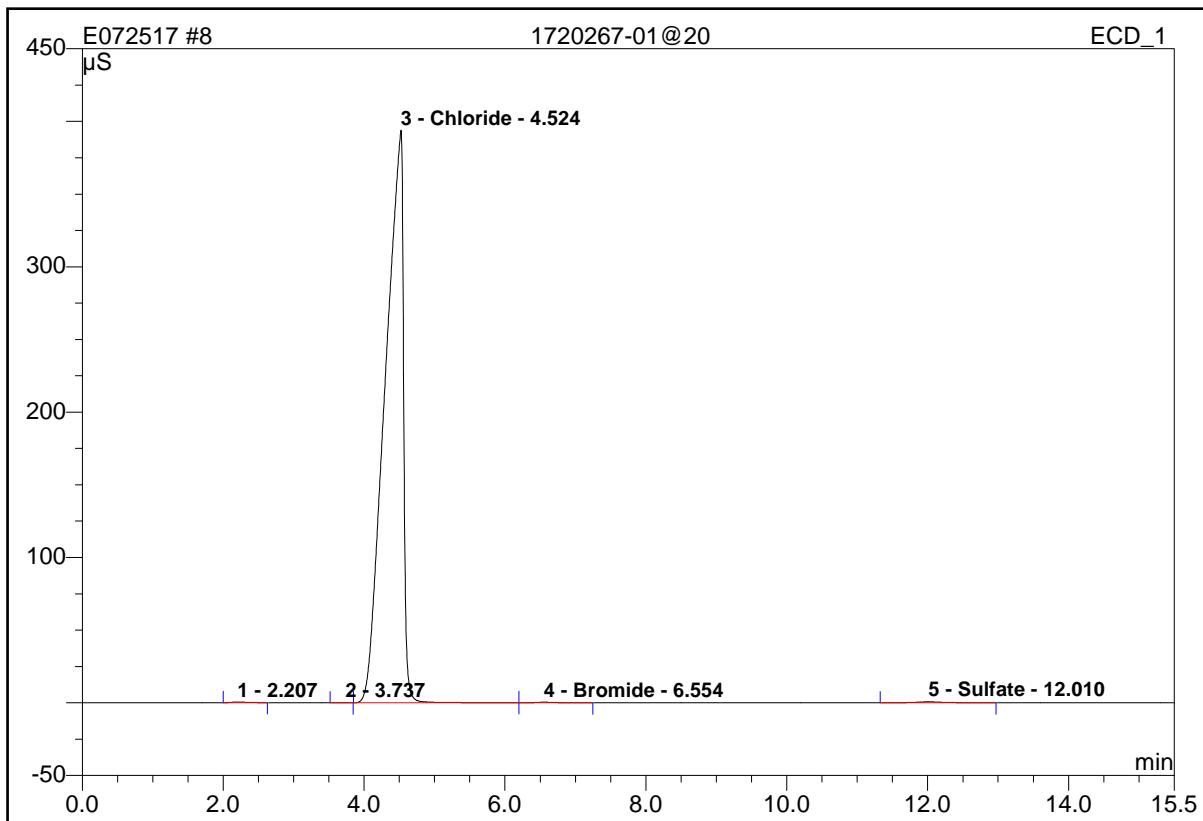
Environmental Testing Laboratory Since 1949



Raw Data - Samples

8 1720267-01@20

Sample Name:	1720267-01@20	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 13:48	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.21	n.a.	0.506	0.132	0.11	n.a.	BM
2	3.74	n.a.	0.025	0.005	0.00	n.a.	BMB
3	4.52	Chloride	393.809	118.050	99.52	386.467	BM
4	6.55	Bromide	0.423	0.120	0.10	1.732	MB
5	12.01	Sulfate	0.652	0.310	0.26	2.372	BMB
Total:			395.416	118.617	100.00	390.571	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

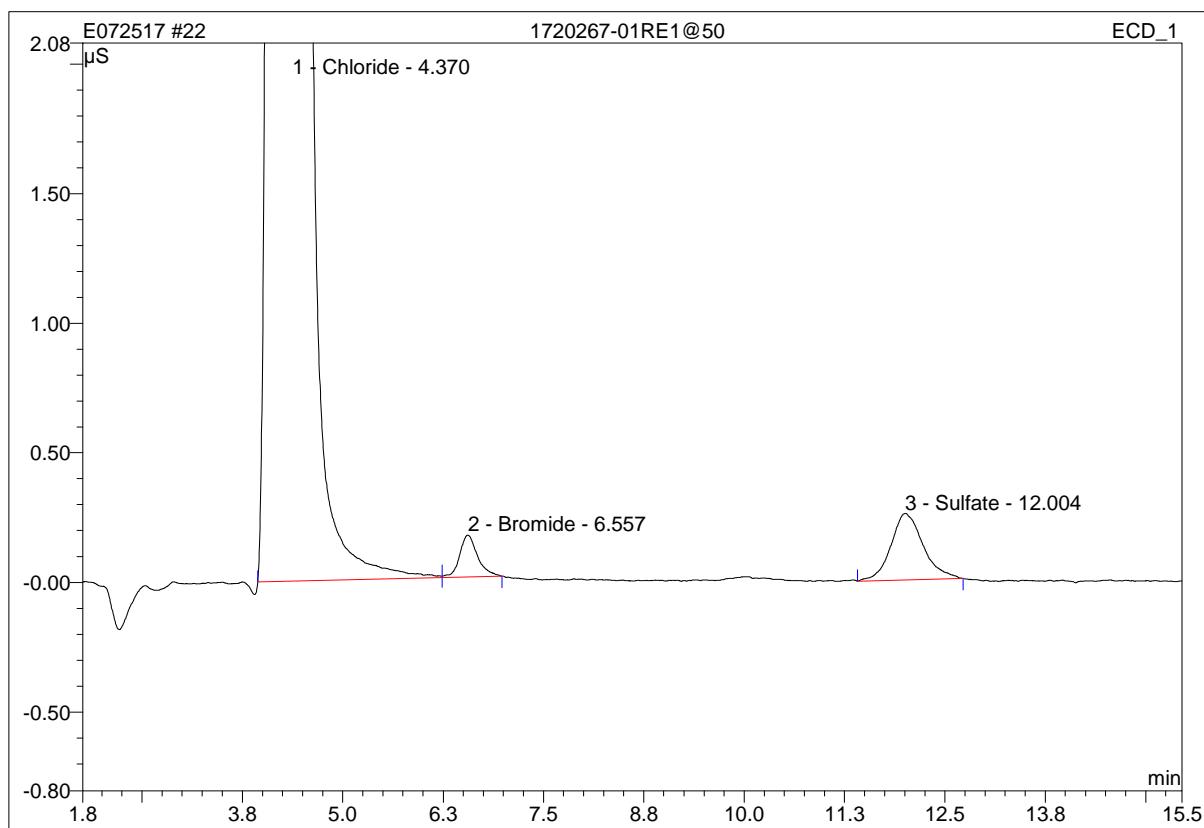
M = Main

R = Rider

BMB = This peak type is for resolved peaks.

22 1720267-01RE1@50

Sample Name:	1720267-01RE1@50	Injection Volume:	20.0
Vial Number:	20	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 17:58	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	4.37	Chloride	218.279	44.779	99.64	177.723	BM
2	6.56	Bromide	0.161	0.042	0.09	0.611	MB
3	12.00	Sulfate	0.256	0.119	0.27	1.007	BMB
Total:			218.696	44.940	100.00	179.341	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

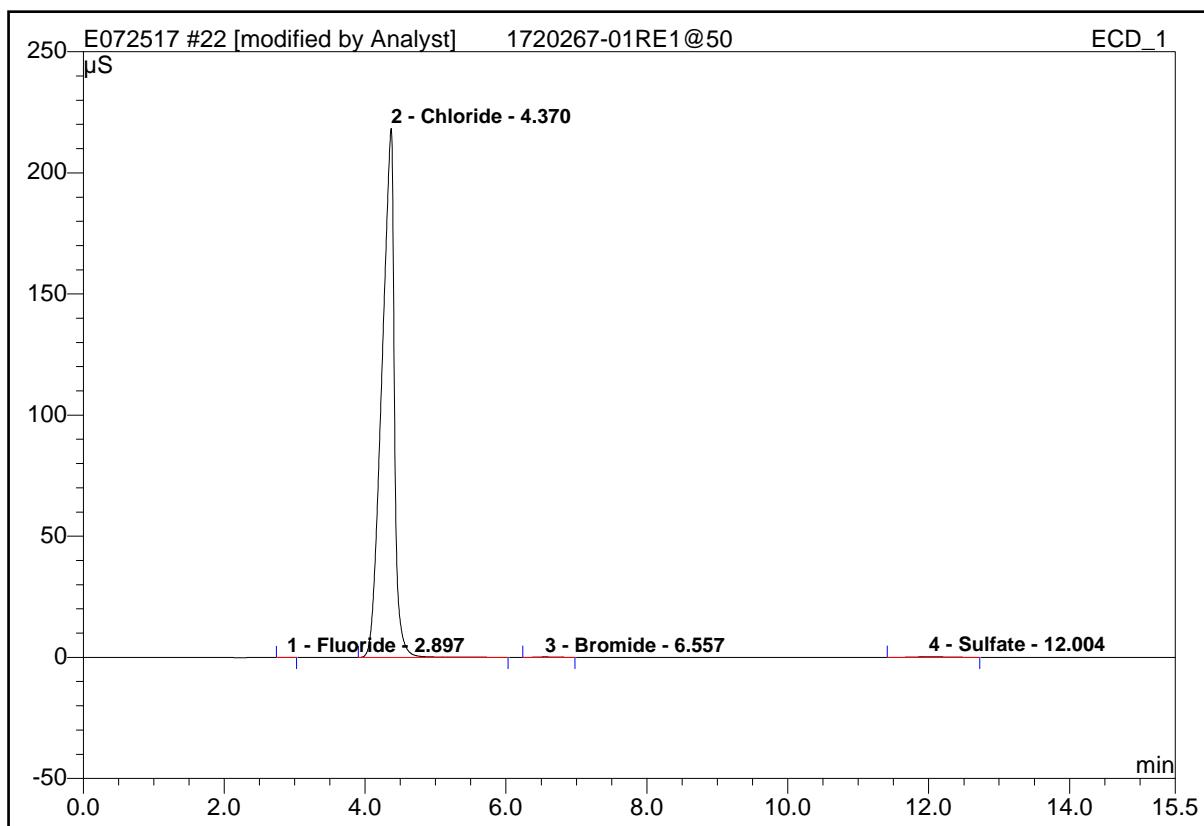
M = Main

R= Rider

BMB = This peak type is for resolved peaks.

22 1720267-01RE1@50

Sample Name:	1720267-01RE1@50	Injection Volume:	20.0
Vial Number:	20	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 17:58	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area $\mu\text{S}^*\text{min}$	Rel.Area %	Amount ppm	Type
1	2.90	Fluoride	0.017	0.002	0.00	0.008	BMB*
2	4.37	Chloride	218.313	44.814	99.64	177.841	BMB*
3	6.56	Bromide	0.158	0.040	0.09	0.580	BMB*
4	12.00	Sulfate	0.256	0.119	0.27	1.007	BMB
Total:			218.745	44.975	100.00	179.436	

modified on: 07.25.17 21:02 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

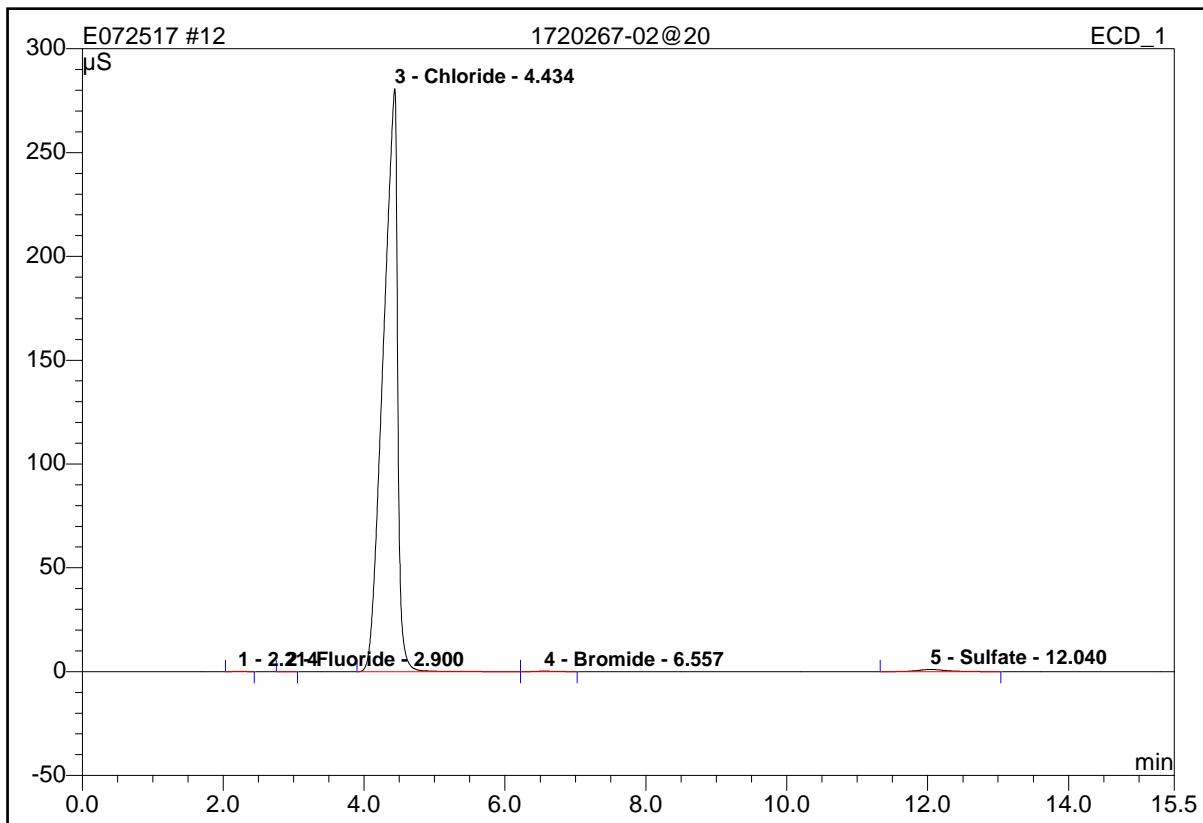
M = Main

R = Rider

BMB = This peak type is for resolved peaks.

12 1720267-02@20

Sample Name: 1720267-02@20 **Injection Volume:** 20.0
Vial Number: 17 **Channel:** IC5
Sample Type: unknown **Wavelength:** n.a.
Control Program: IC5 **Bandwidth:** n.a.
Quantif. Method: IC5 ANION **Dilution Factor:** 1.0000
Recording Time: 7/25/2017 14:59 **Sample Weight:** 1.0000
Run Time (min): 15.50 **Sample Amount:** 1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	2.21	n.a.	0.062	0.012	0.02	n.a.	BMB
2	2.90	Fluoride	0.038	0.005	0.01	0.020	BMB
3	4.43	Chloride	280.828	66.420	99.13	246.394	BM
4	6.56	Bromide	0.240	0.067	0.10	0.974	MB
5	12.04	Sulfate	1.034	0.495	0.74	3.694	BMB
Total:			282.201	66.999	100.00	251.082	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

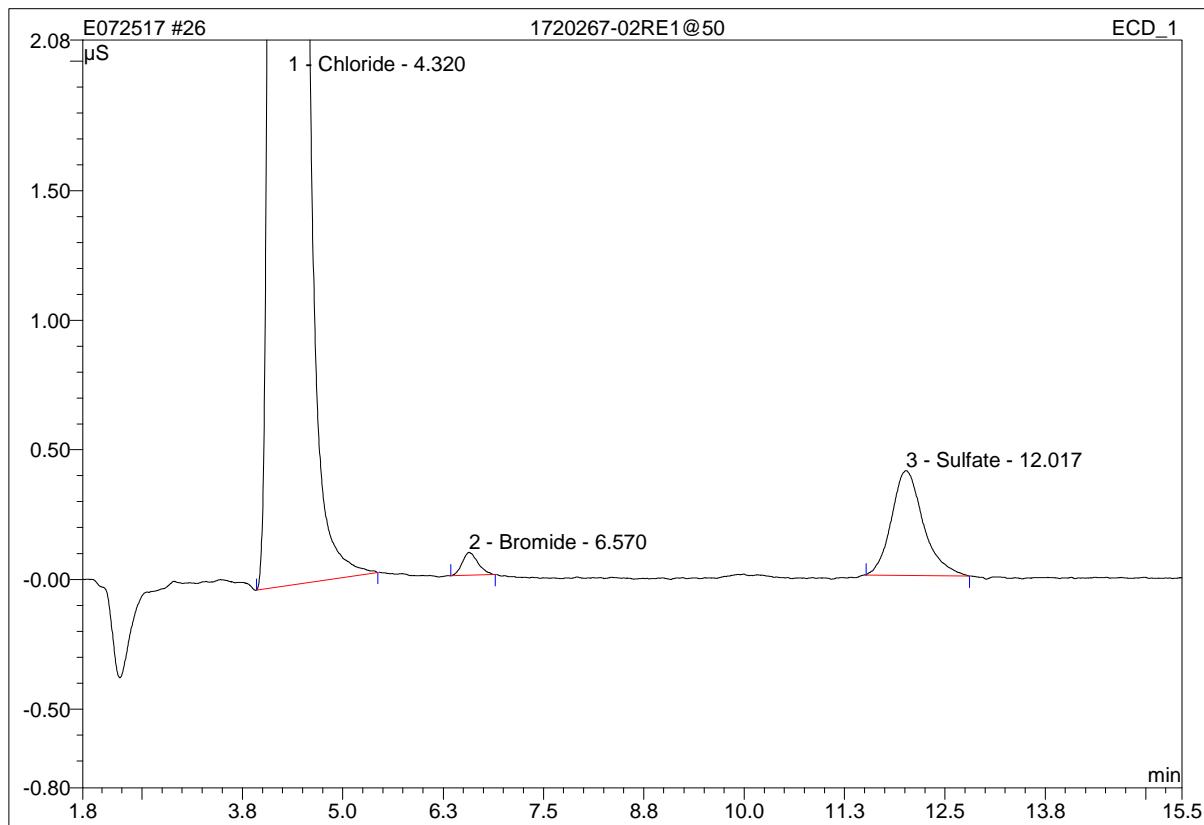
M = Main

R = Rider

BMB = This peak type is for resolved peaks.

26 1720267-02RE1@50

Sample Name:	1720267-02RE1@50	Injection Volume:	20.0
Vial Number:	20	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 19:10	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	4.32	Chloride	139.600	24.694	99.17	105.768	BMB
2	6.57	Bromide	0.088	0.020	0.08	0.297	BMB
3	12.02	Sulfate	0.404	0.186	0.75	1.483	BMB
Total:			140.092	24.900	100.00	107.548	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

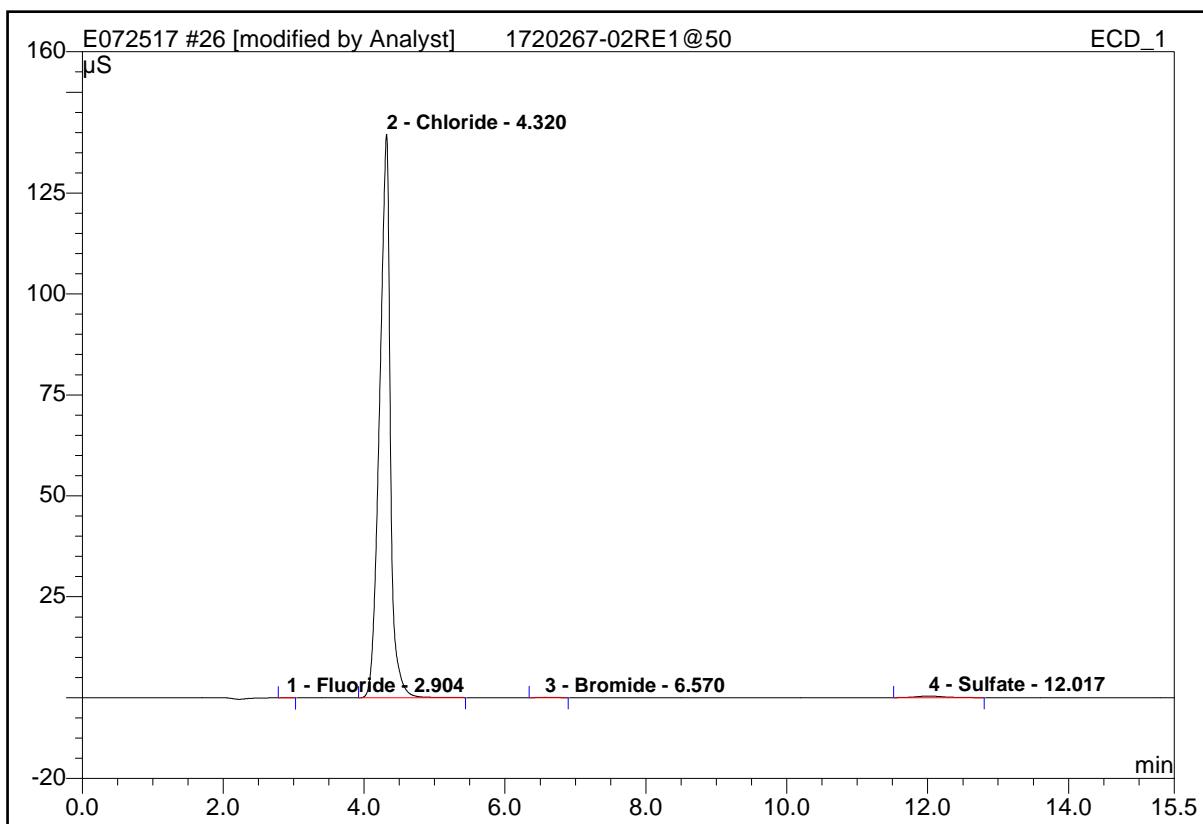
M = Main

R= Rider

BMB = This peak type is for resolved peaks.

26 1720267-02RE1@50

Sample Name:	1720267-02RE1@50	Injection Volume:	20.0
Vial Number:	20	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 19:10	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area $\mu\text{S}^*\text{min}$	Rel.Area %	Amount ppm	Type
1	2.90	Fluoride	0.017	0.002	0.01	0.007	BMB*
2	4.32	Chloride	139.600	24.694	99.16	105.768	BMB
3	6.57	Bromide	0.088	0.020	0.08	0.297	BMB
4	12.02	Sulfate	0.404	0.186	0.75	1.483	BMB
Total:			140.110	24.902	100.00	107.555	

modified on: 07.25.17 21:03 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

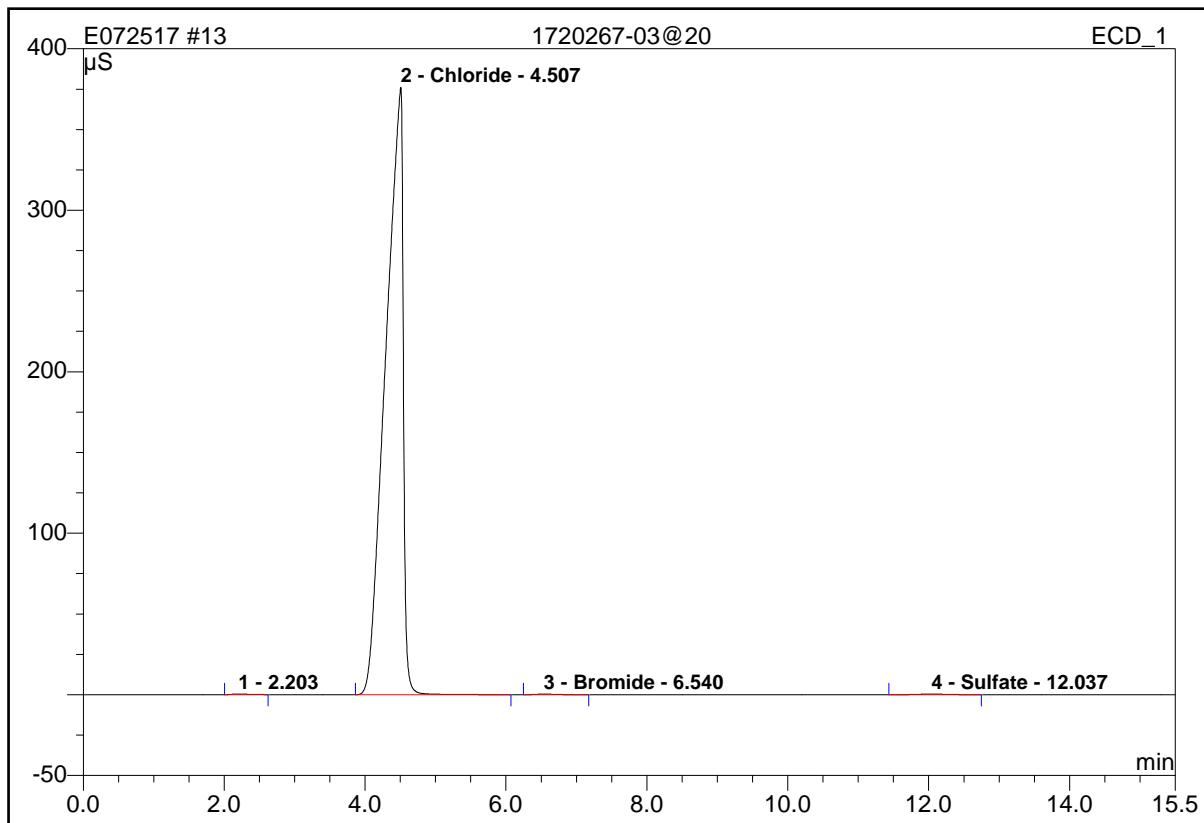
M = Main

R = Rider

BMB = This peak type is for resolved peaks.

13 1720267-03@20

Sample Name:	1720267-03@20	Injection Volume:	20.0
Vial Number:	17	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 15:17	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	2.20	n.a.	0.409	0.105	0.10	n.a.	BMB
2	4.51	Chloride	376.045	108.049	99.66	361.341	BMB
3	6.54	Bromide	0.376	0.099	0.09	1.422	BMB
4	12.04	Sulfate	0.365	0.168	0.15	1.354	BMB
Total:			377.195	108.421	100.00	364.117	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

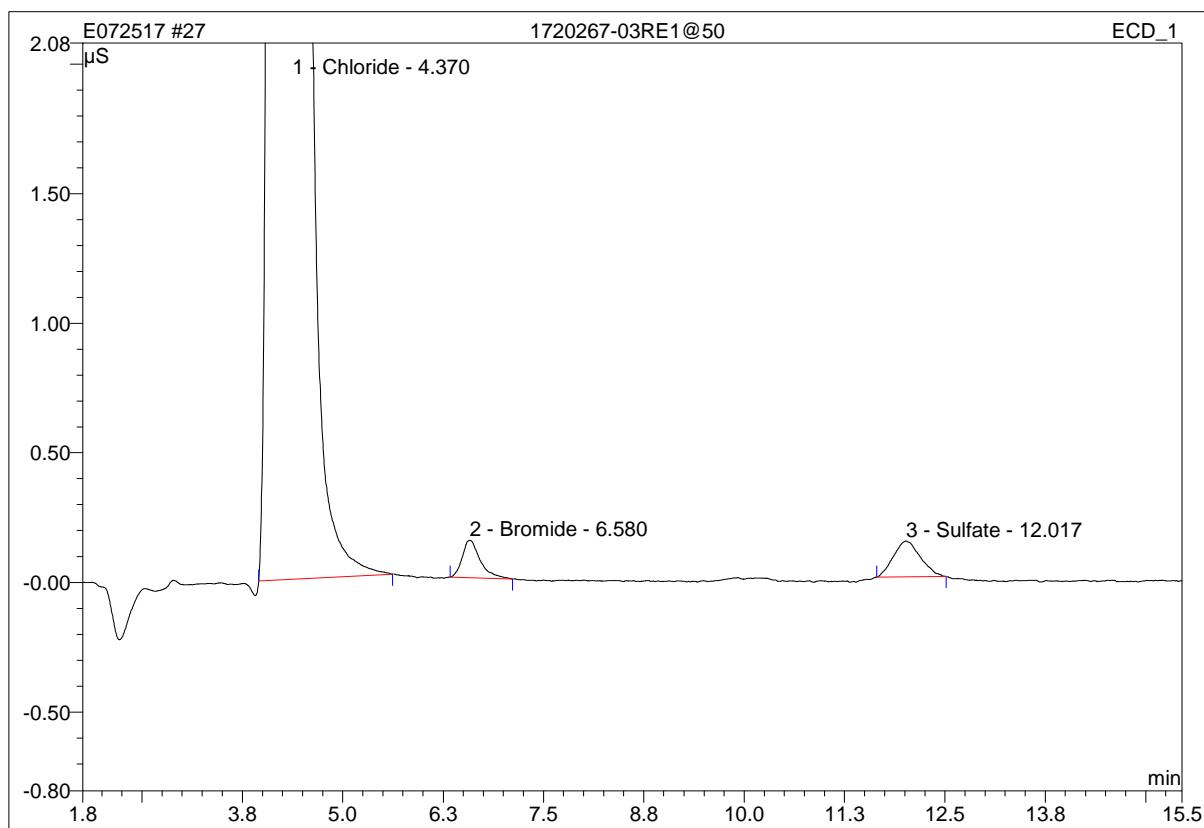
M = Main

R = Rider

BMB = This peak type is for resolved peaks.

27 1720267-03RE1@50

Sample Name:	1720267-03RE1@50	Injection Volume:	20.0
Vial Number:	20	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 19:28	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	4.37	Chloride	207.002	41.466	99.78	166.482	BMB
2	6.58	Bromide	0.145	0.038	0.09	0.546	BMB
3	12.02	Sulfate	0.138	0.054	0.13	0.536	BMB
Total:			207.284	41.557	100.00	167.564	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

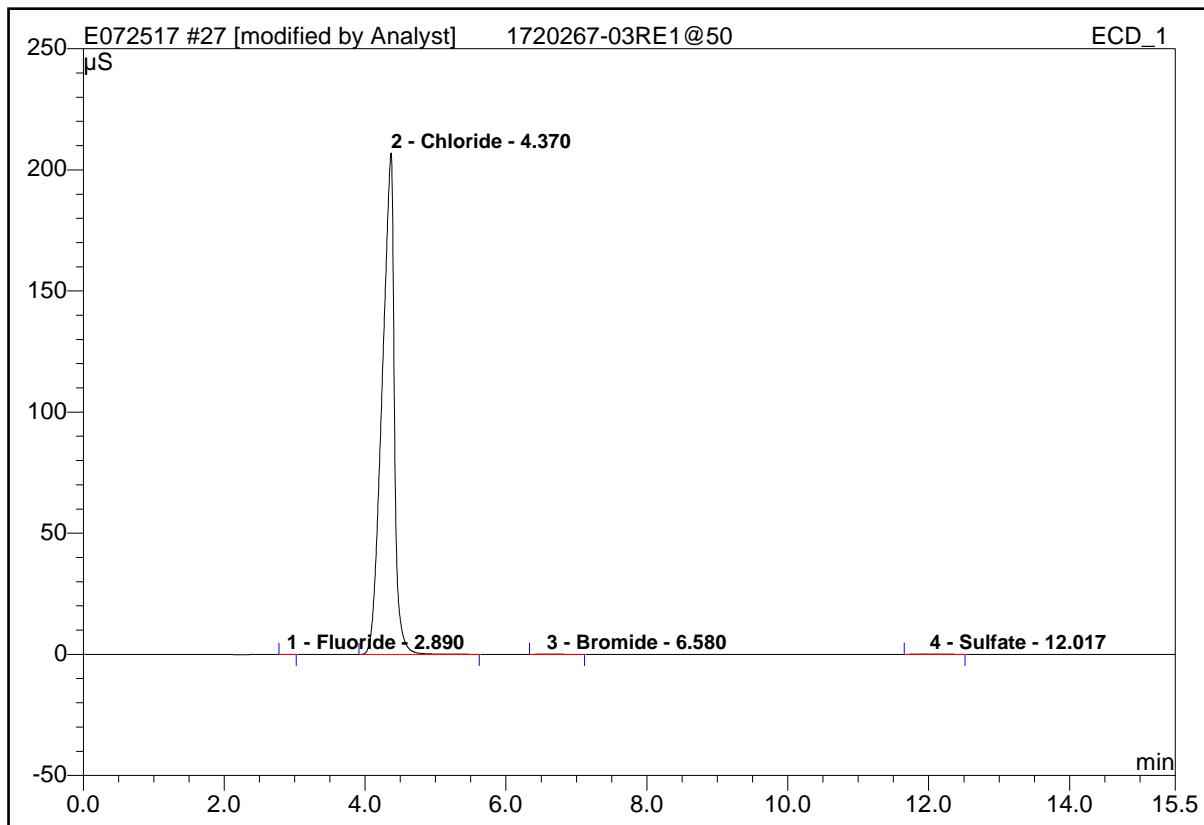
M = Main

R= Rider

BMB = This peak type is for resolved peaks.

27 1720267-03RE1@50

Sample Name:	1720267-03RE1@50	Injection Volume:	20.0
Vial Number:	20	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 19:28	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area $\mu\text{S}^*\text{min}$	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	0.026	0.003	0.01	0.011	BMB*
2	4.37	Chloride	207.042	41.512	99.77	166.638	BMB*
3	6.58	Bromide	0.145	0.038	0.09	0.546	BMB
4	12.02	Sulfate	0.138	0.054	0.13	0.536	BMB
Total:			207.350	41.606	100.00	167.731	

modified on: 07.25.17 21:03 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

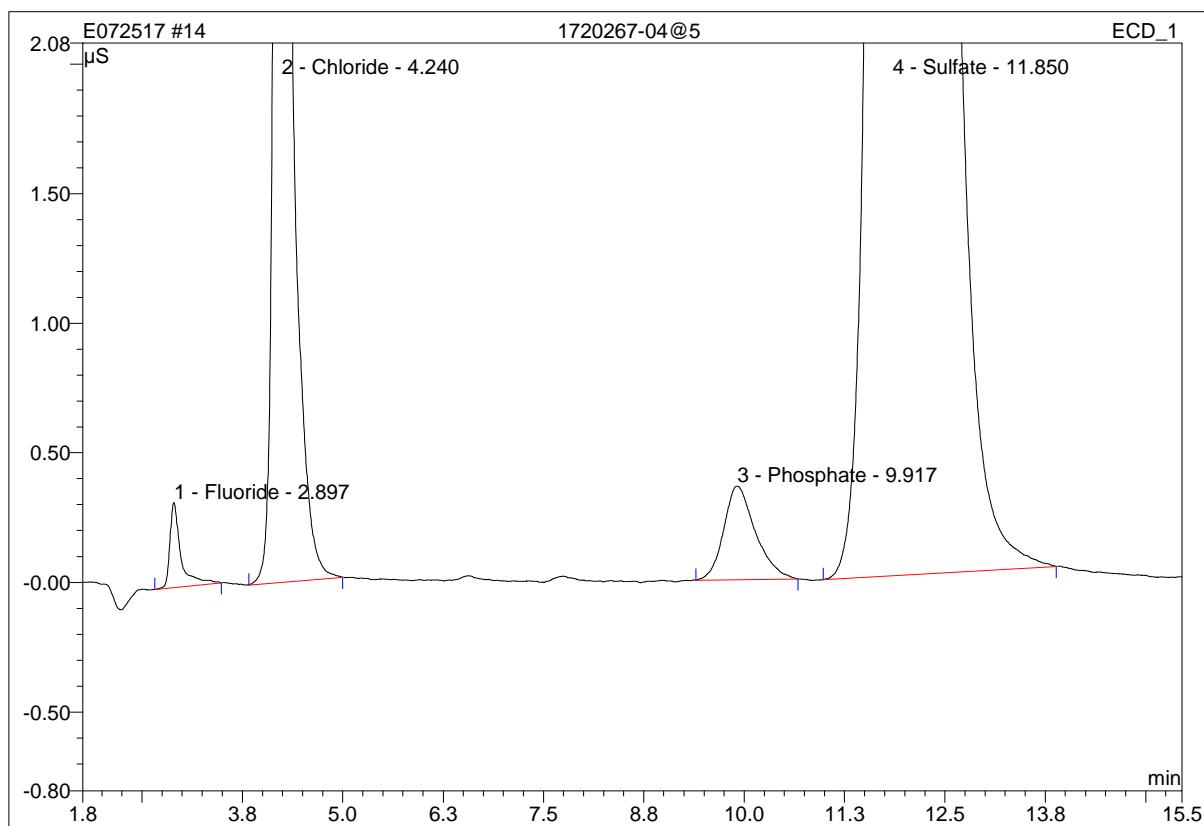
M = Main

R = Rider

BMB = This peak type is for resolved peaks.

14 1720267-04@5

Sample Name:	1720267-04@5	Injection Volume:	20.0
Vial Number:	17	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 15:35	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	2.90	Fluoride	0.328	0.052	0.15	0.208	BMB
2	4.24	Chloride	14.232	2.298	6.69	11.047	BMB
3	9.92	Phosphate	0.360	0.165	0.48	n.a.	BMB
4	11.85	Sulfate	67.074	31.827	92.68	199.226	BMB
Total:			81.994	34.342	100.00	210.481	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

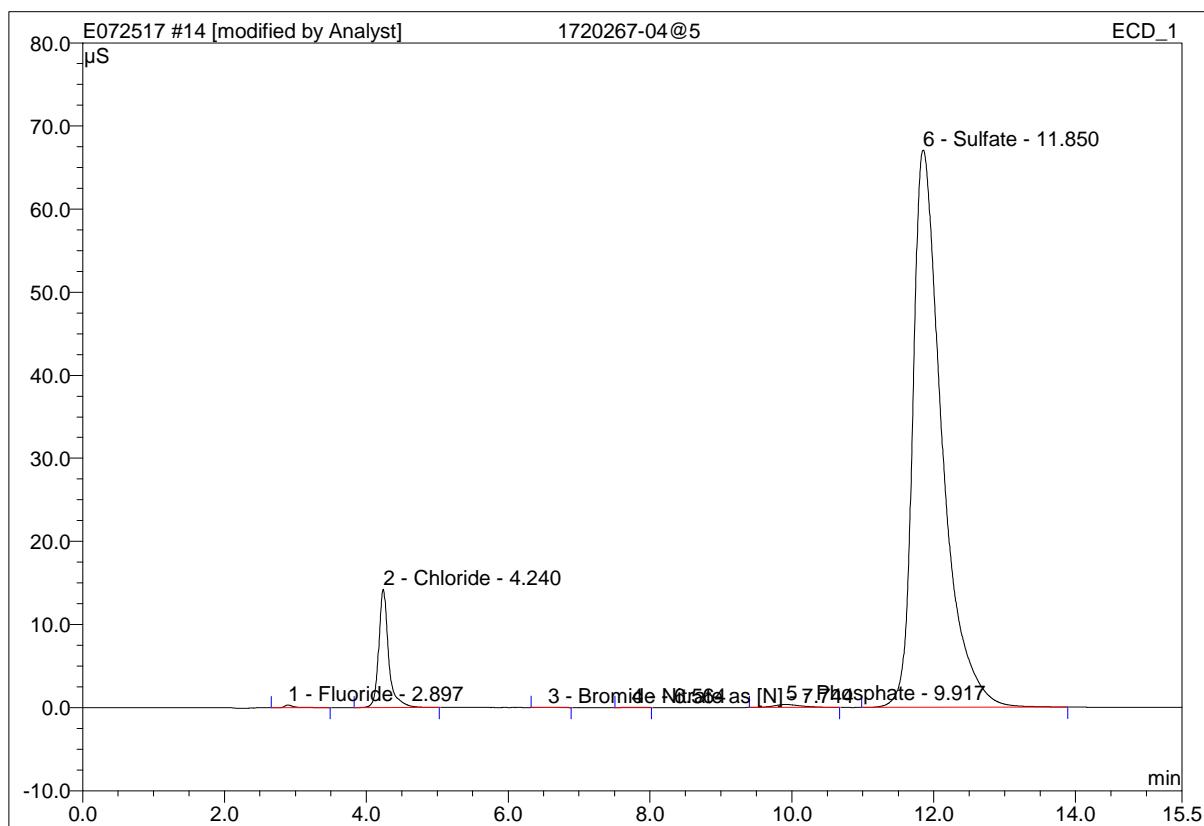
M = Main

R= Rider

BMB = This peak type is for resolved peaks.

14 1720267-04@5

Sample Name:	1720267-04@5	Injection Volume:	20.0
Vial Number:	17	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 15:35	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.90	Fluoride	0.328	0.052	0.15	0.208	BMB
2	4.24	Chloride	14.232	2.299	6.69	11.051	BMB*
3	6.56	Bromide	0.018	0.004	0.01	0.064	BMB*
4	7.74	Nitrate as [N]	0.021	0.005	0.02	0.013	BMB*
5	9.92	Phosphate	0.360	0.165	0.48	n.a.	BMB
6	11.85	Sulfate	67.074	31.827	92.65	199.226	BMB
Total:			82.033	34.352	100.00	210.563	

modified on: 07.25.17 17:07 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

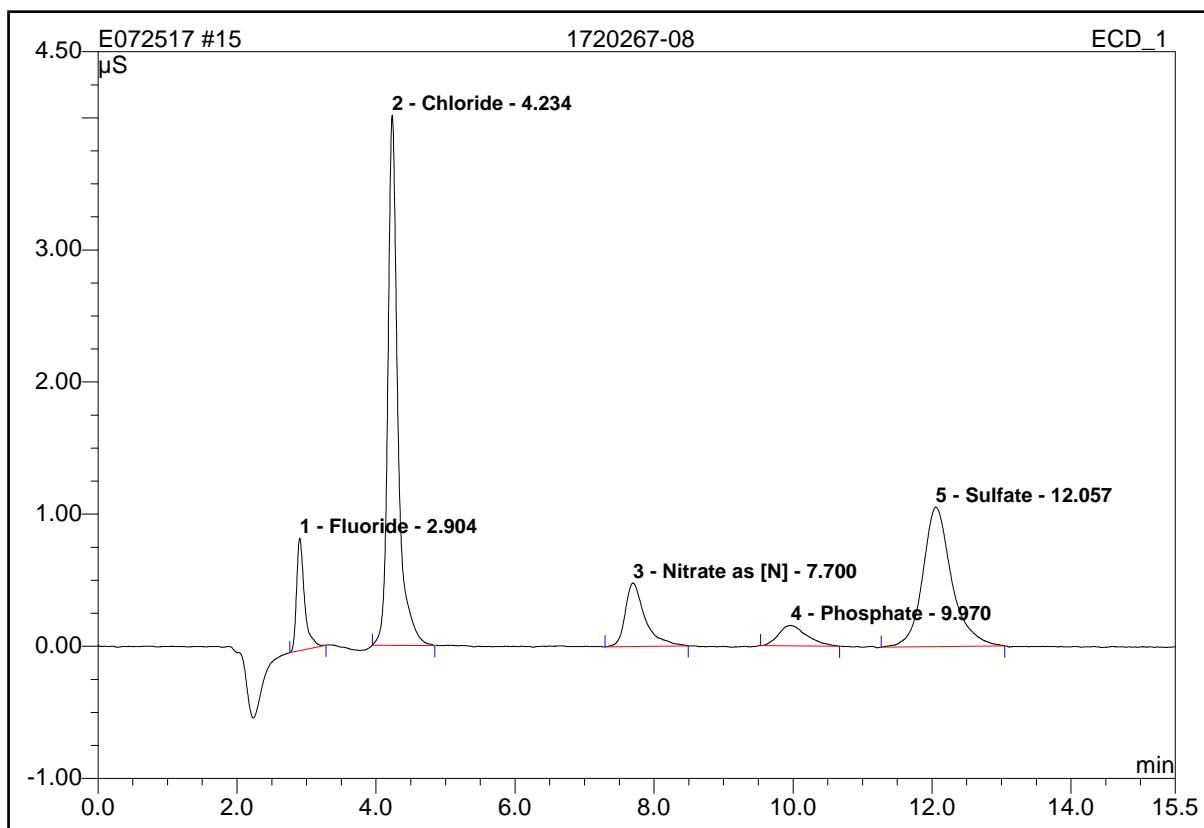
close up/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR15 Build 4656 (243203)

B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

15 1720267-08

Sample Name:	1720267-08	Injection Volume:	20.0
Vial Number:	17	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 15:53	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area $\mu\text{S}^*\text{min}$	Rel.Area %	Amount ppm	Type
1	2.90	Fluoride	0.850	0.112	7.34	0.442	BMB
2	4.23	Chloride	4.013	0.668	43.94	3.295	BMB
3	7.70	Nitrate as [N]	0.482	0.159	10.44	0.409	BMB
4	9.97	Phosphate	0.154	0.073	4.79	n.a.	BMB
5	12.06	Sulfate	1.056	0.509	33.50	3.799	BMB
Total:			6.555	1.521	100.00	7.946	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

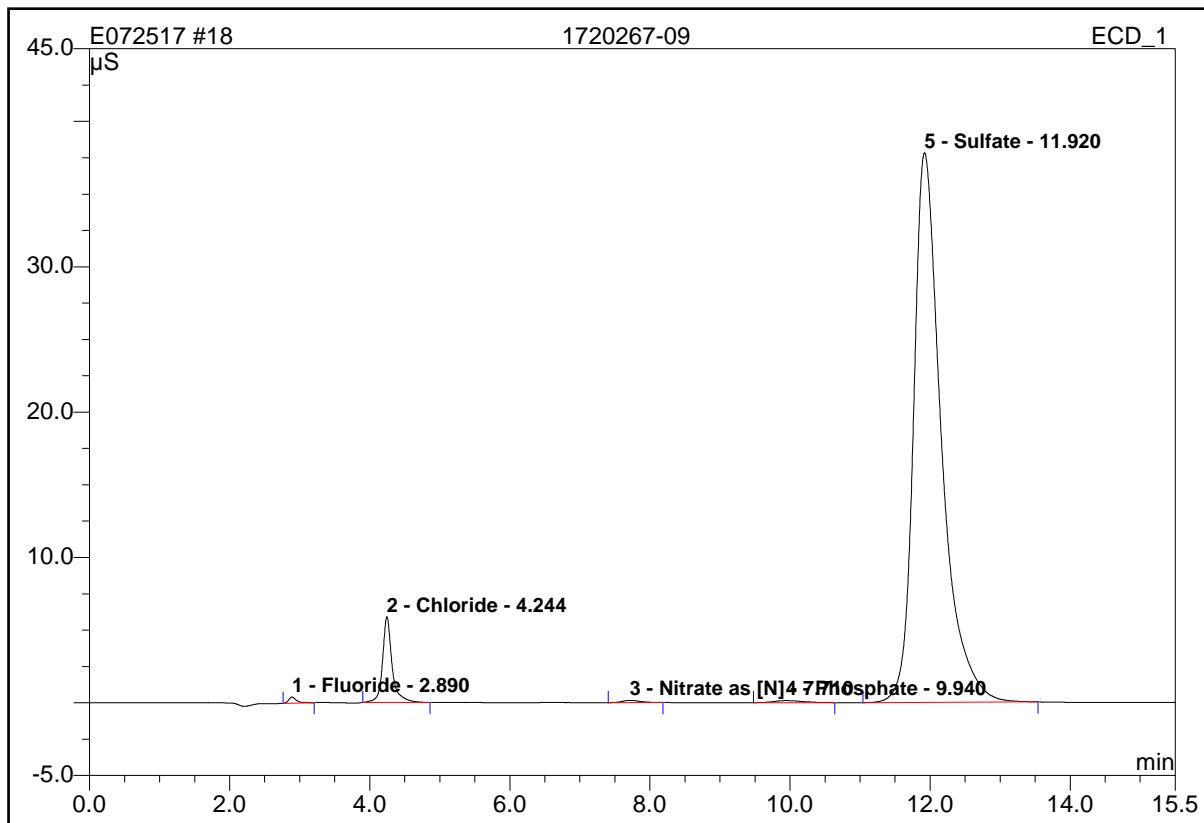
M = Main

R = Rider

BMB = This peak type is for resolved peaks.

18 1720267-09

Sample Name:	1720267-09	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 16:47	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area $\mu\text{S}^*\text{min}$	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	0.424	0.053	0.29	0.212	BMB
2	4.24	Chloride	5.895	0.937	5.07	4.584	BMB
3	7.71	Nitrate as [N]	0.154	0.047	0.25	0.120	BMB
4	9.94	Phosphate	0.142	0.068	0.37	n.a.	BMB
5	11.92	Sulfate	37.813	17.382	94.02	115.140	BMB
Total:			44.428	18.486	100.00	120.056	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

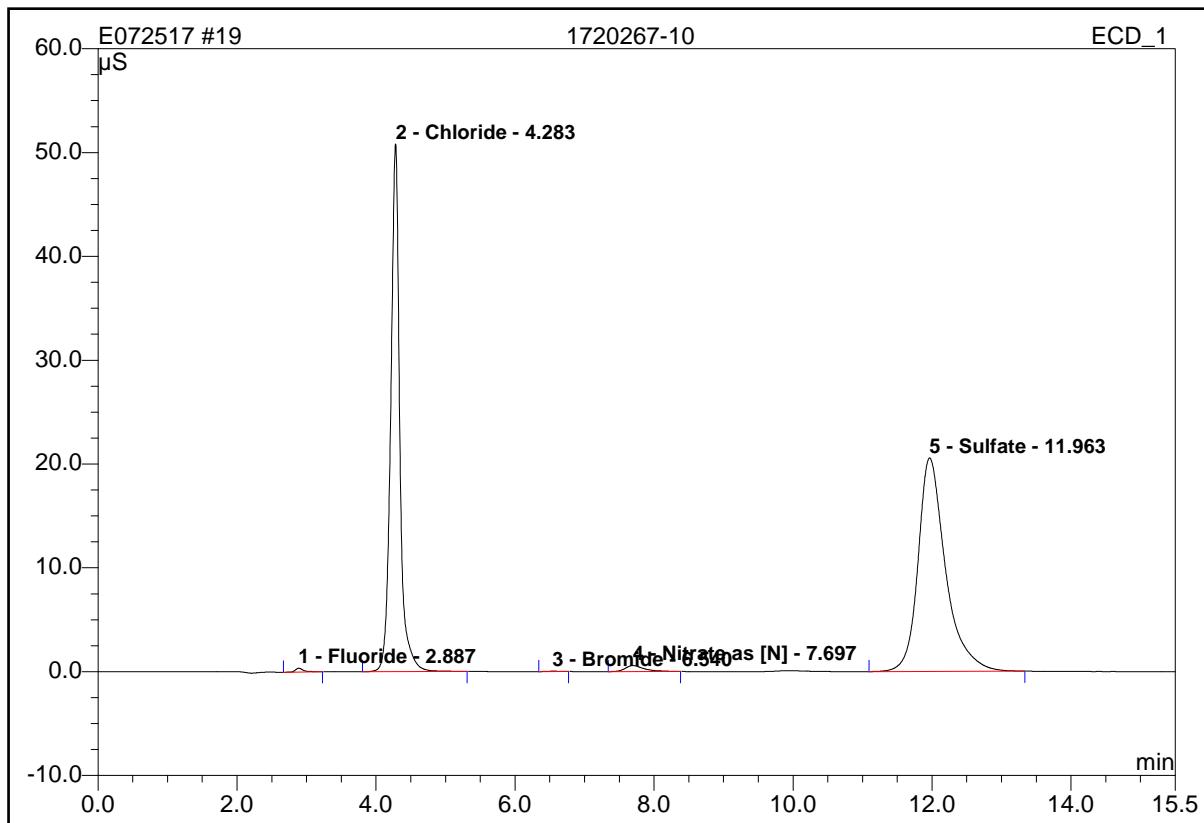
M = Main

R = Rider

BMB = This peak type is for resolved peaks.

19 1720267-10

Sample Name:	1720267-10	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 17:04	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	0.362	0.047	0.27	0.188	BMB
2	4.28	Chloride	50.829	7.659	44.17	35.588	BMB
3	6.54	Bromide	0.036	0.007	0.04	0.114	BMB
4	7.70	Nitrate as [N]	0.573	0.184	1.06	0.474	BMB
5	11.96	Sulfate	20.570	9.442	54.45	64.850	BMB
Total:			72.370	17.340	100.00	101.213	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

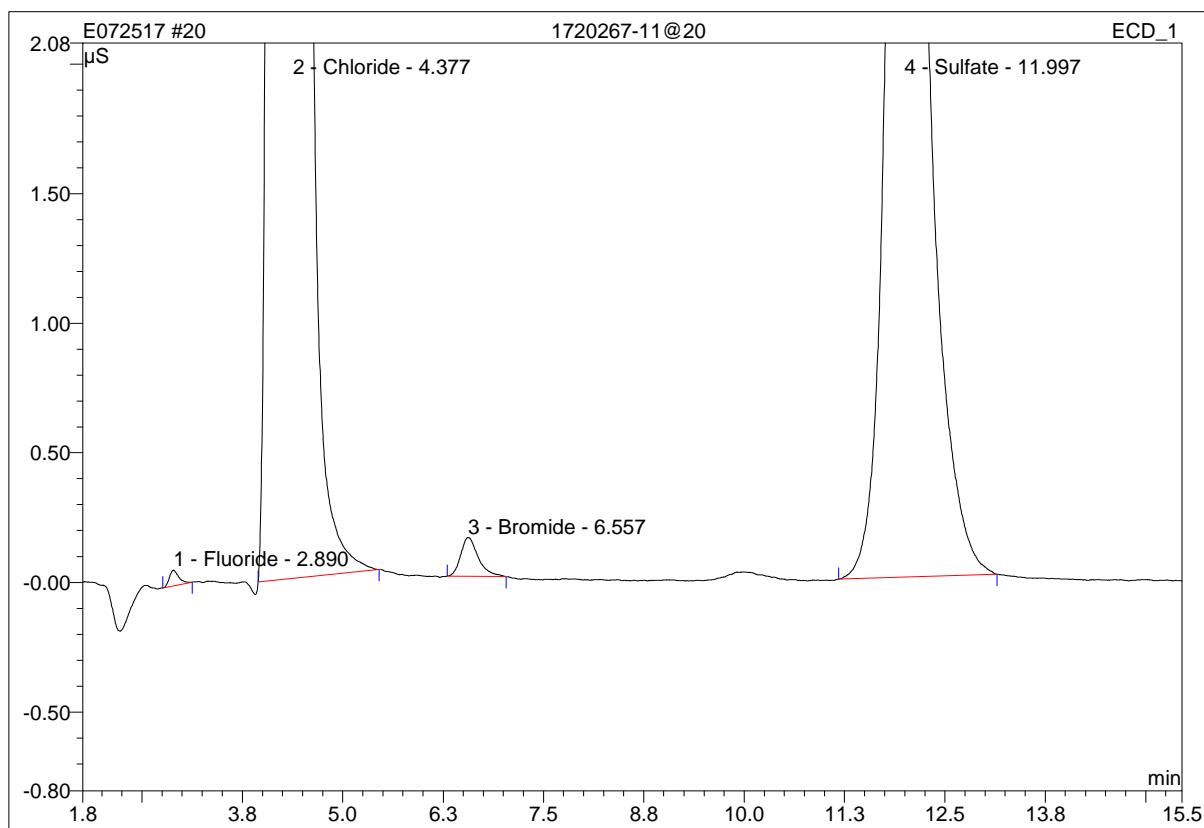
M = Main

R = Rider

BMB = This peak type is for resolved peaks.

20 1720267-11@20

Sample Name:	1720267-11@20	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 17:22	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	0.060	0.008	0.02	0.031	BMB
2	4.38	Chloride	220.422	45.134	93.39	178.914	BMB
3	6.56	Bromide	0.149	0.038	0.08	0.553	BMB
4	12.00	Sulfate	6.742	3.151	6.52	22.411	BMB
Total:			227.374	48.331	100.00	201.910	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

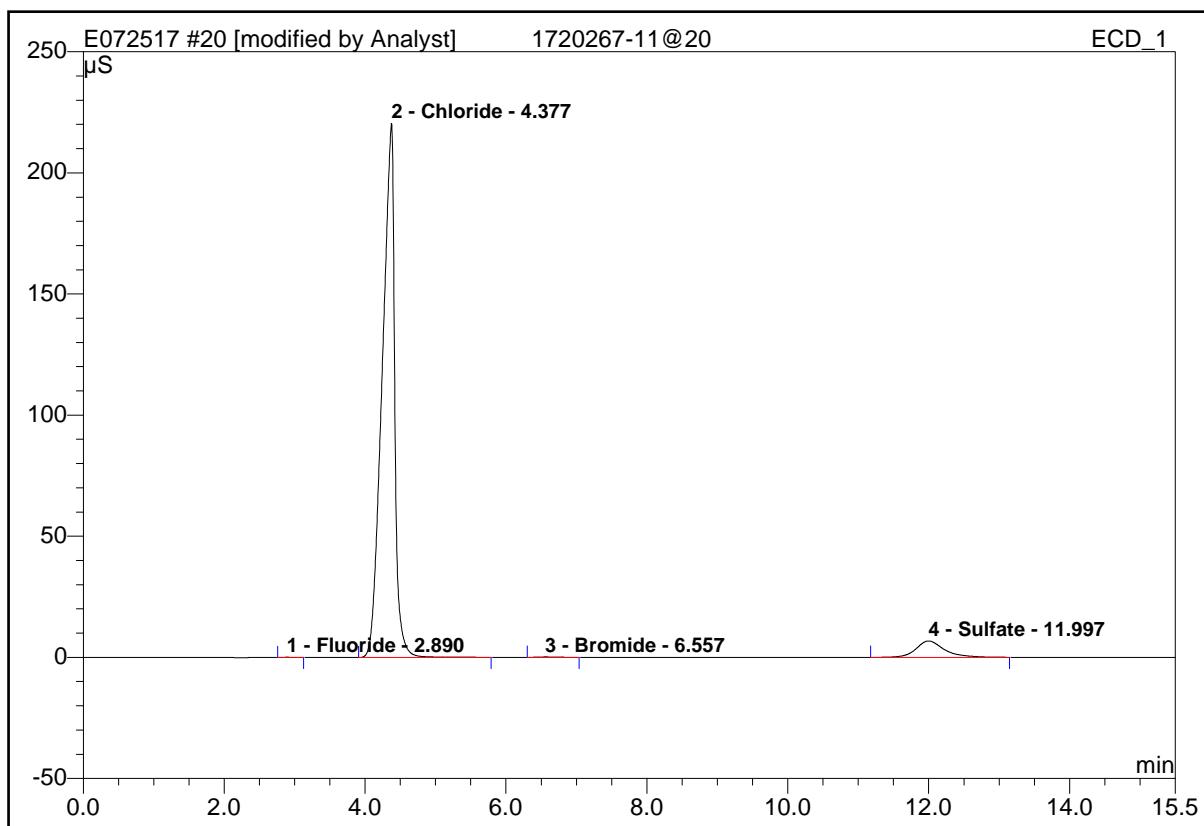
M = Main

R= Rider

BMB = This peak type is for resolved peaks.

20 1720267-11@20

Sample Name:	1720267-11@20	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 17:22	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area $\mu\text{S}^*\text{min}$	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	0.060	0.008	0.02	0.031	BMB
2	4.38	Chloride	220.465	45.201	93.39	179.141	BMB*
3	6.56	Bromide	0.149	0.038	0.08	0.553	BMB
4	12.00	Sulfate	6.742	3.151	6.51	22.411	BMB
Total:			227.417	48.398	100.00	202.137	

modified on: 07.25.17 18:02 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main

R = Rider

BMB = This peak type is for resolved peaks.



Laboratories, Inc.

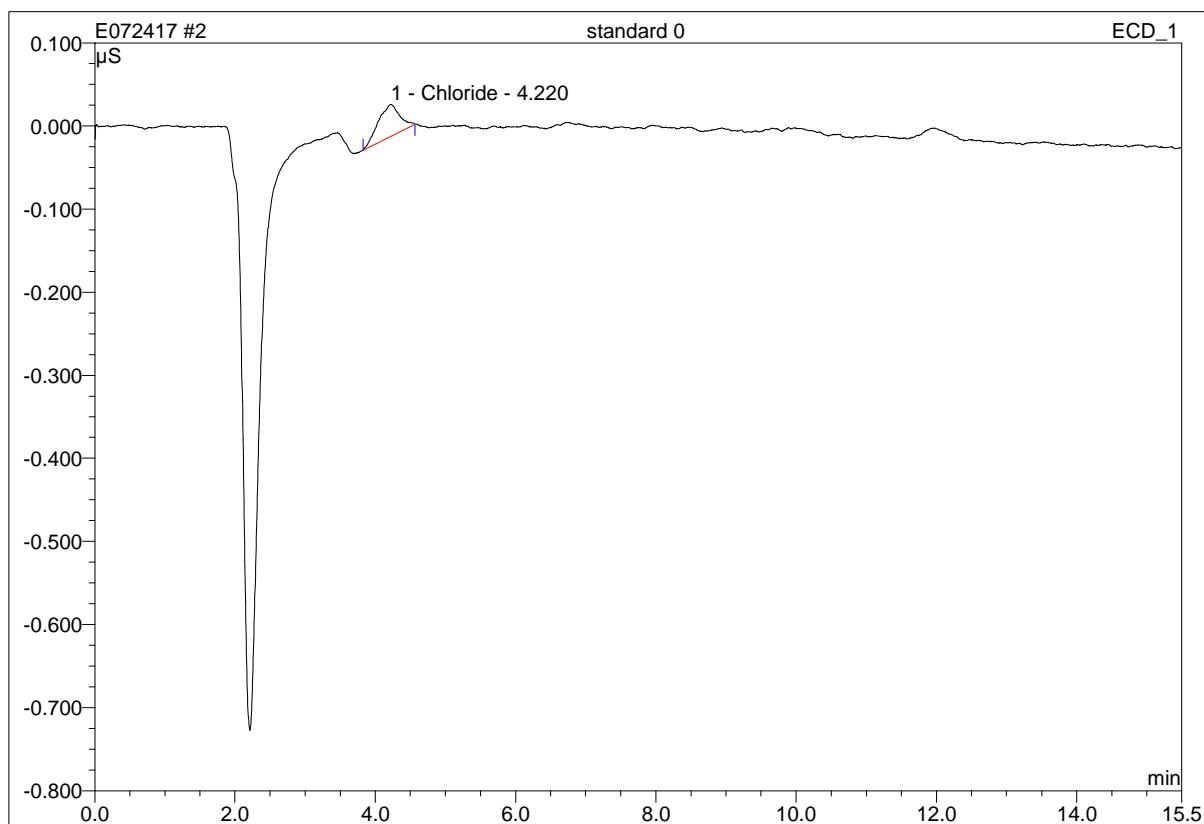
Environmental Testing Laboratory Since 1949



Raw Data - Calibration Standards

2 standard 0

Sample Name:	standard 0	Injection Volume:	20.0
Vial Number:	23	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 8:24	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	4.22	Chloride	0.038	0.014	100.00	0.227	BMB
Total:			0.038	0.014	100.00	0.227	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

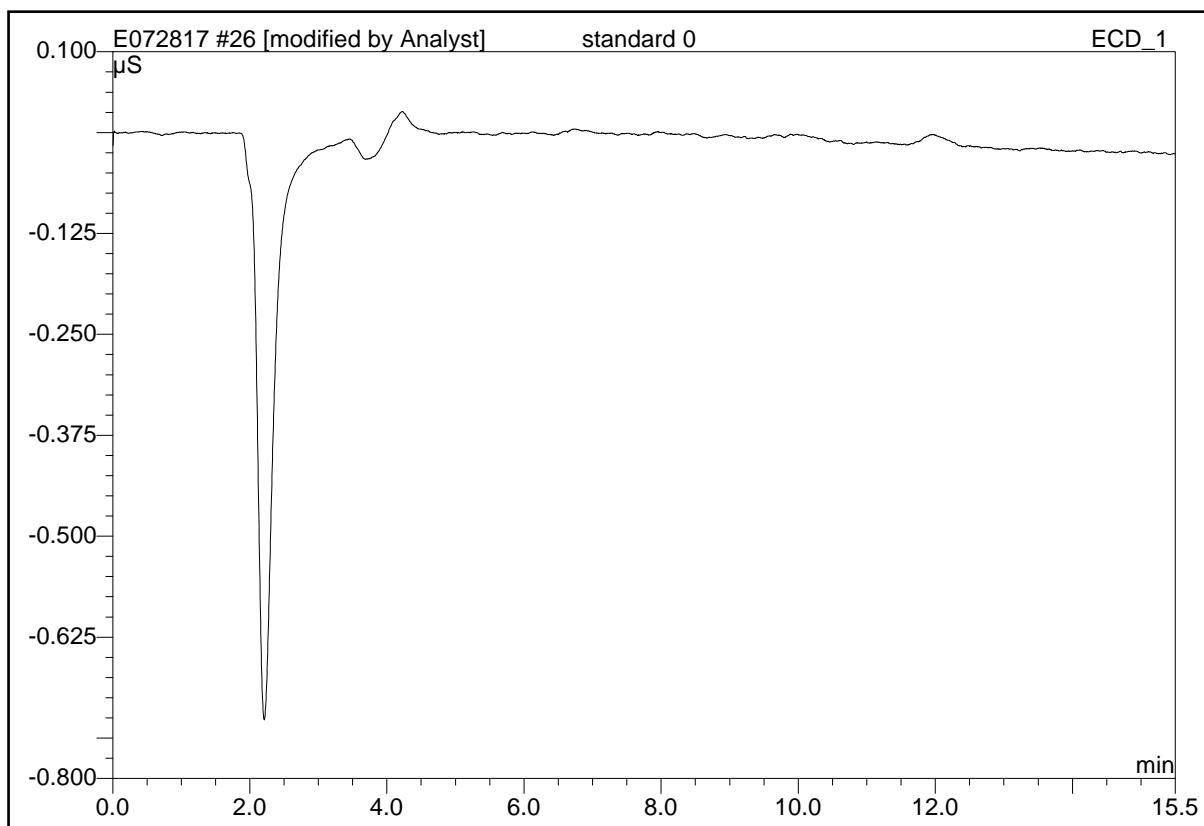
M = Main

R= Rider

BMB = This peak type is for resolved peaks.

26 standard 0

Sample Name:	standard 0	Injection Volume:	20.0
Vial Number:	23	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 8:24	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

modified on: 07.24.17 11:54 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

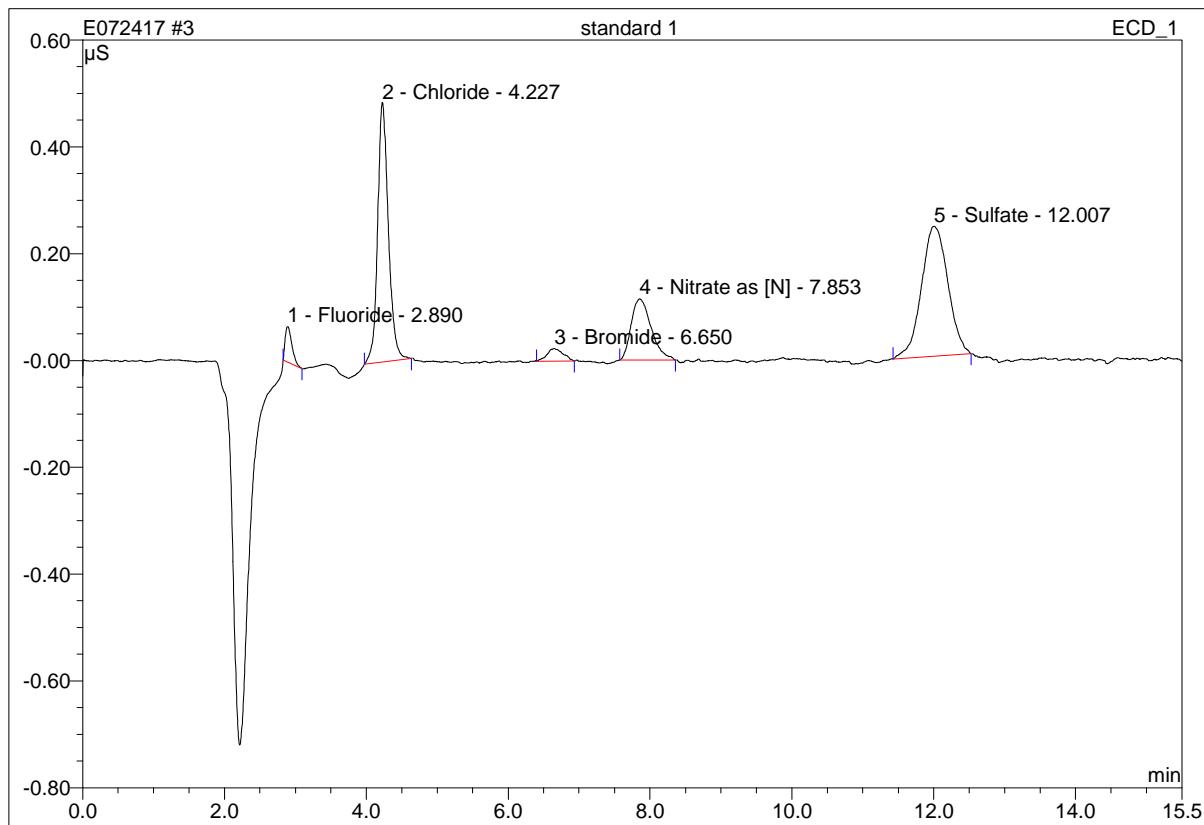
M = Main

R = Rider

BMB = This peak type is for resolved peaks.

3 standard 1

Sample Name:	standard 1	Injection Volume:	20.0
Vial Number:	22	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 8:42	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	0.067	0.007	3.06	0.044	BMB
2	4.23	Chloride	0.486	0.085	35.31	0.571	BMB
3	6.65	Bromide	0.023	0.006	2.54	0.095	BMB
4	7.85	Nitrate as [N]	0.115	0.037	15.51	0.103	BMB
5	12.01	Sulfate	0.243	0.105	43.57	0.964	BMB
Total:			0.933	0.241	100.00	1.776	

modified on: n.a.

By: OLH/EMW/JSW

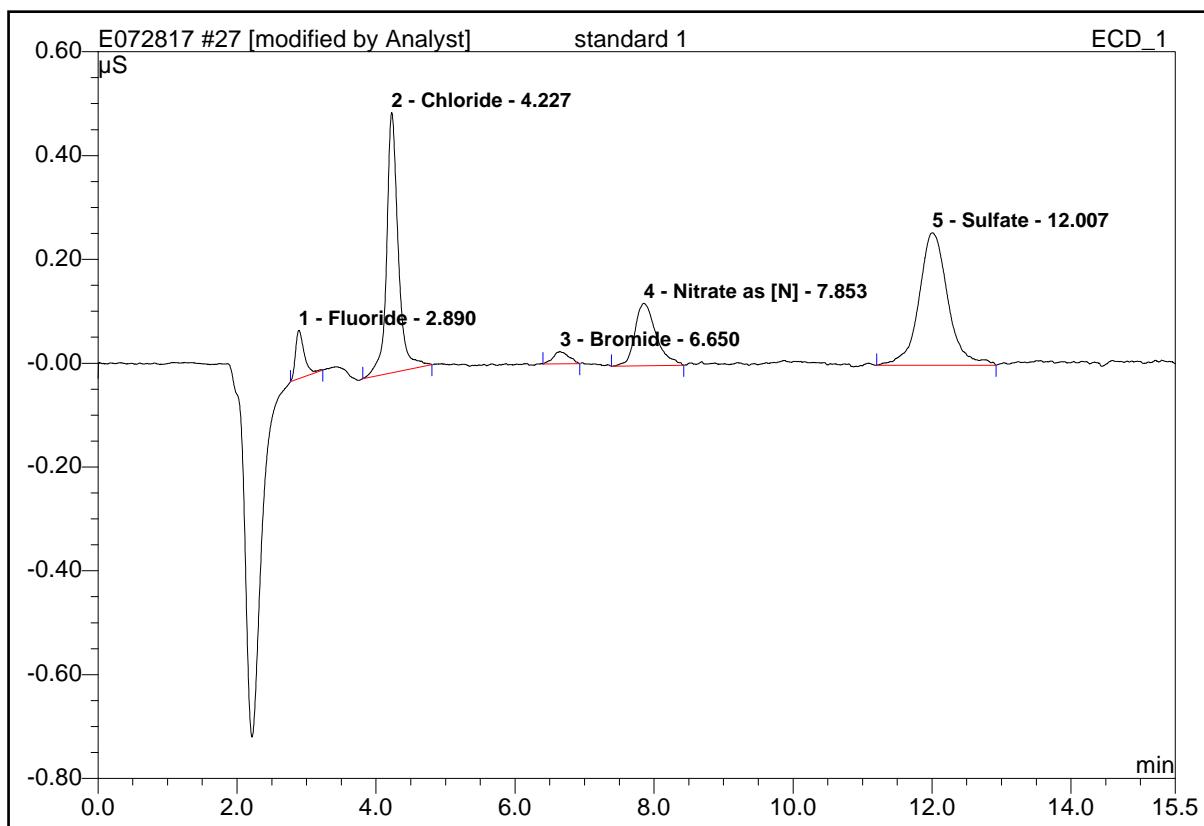
* = Manual integrations due to peak, rider or baseline error.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

27 standard 1

Sample Name:	standard 1	Injection Volume:	20.0
Vial Number:	22	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 8:42	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	0.093	0.013	4.77	0.053	BMB*
2	4.23	Chloride	0.501	0.097	34.38	0.541	BMB*
3	6.65	Bromide	0.023	0.006	2.17	0.095	BMB
4	7.85	Nitrate as [N]	0.120	0.042	15.10	0.109	BMB*
5	12.01	Sulfate	0.255	0.123	43.57	1.030	BMB*
Total:			0.993	0.281	100.00	1.828	

modified on: 07.24.17 11:55 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

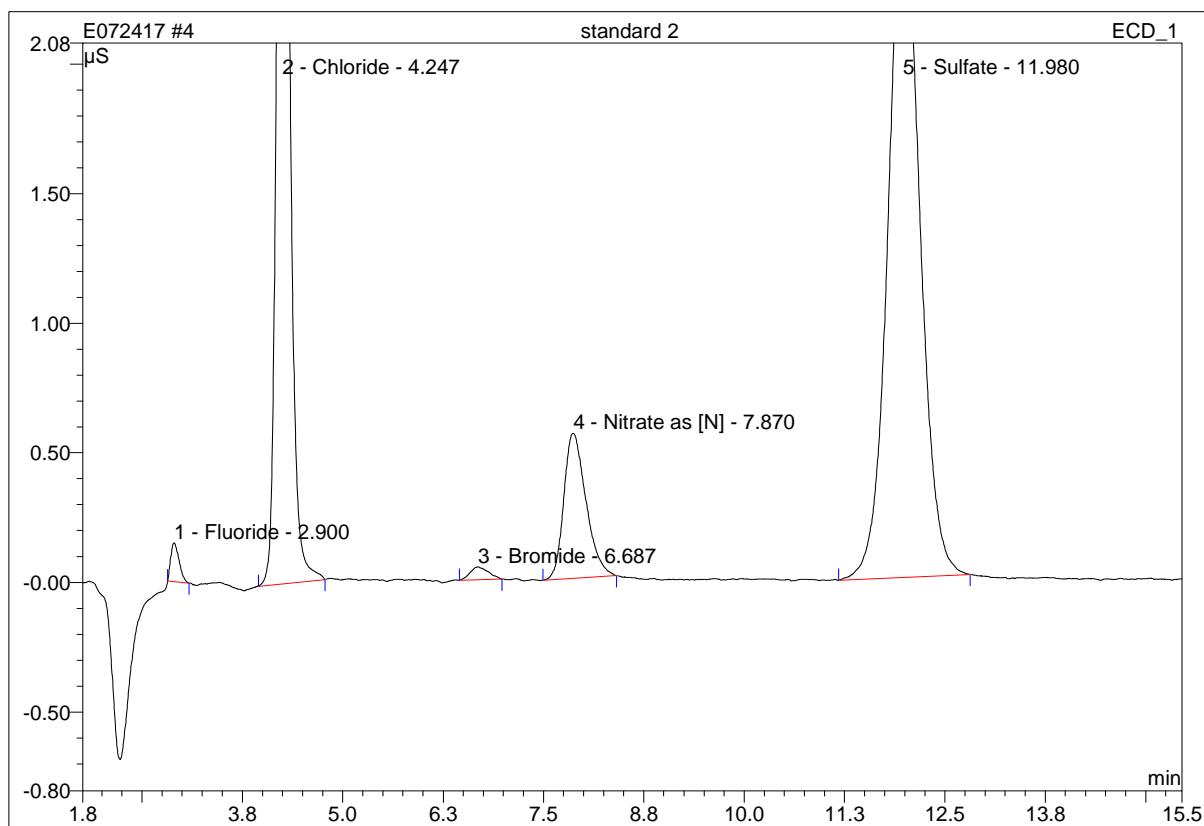
M = Main

R = Rider

BMB = This peak type is for resolved peaks.

4 standard 2

Sample Name:	standard 2	Injection Volume:	20.0
Vial Number:	22	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 8:59	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area $\mu\text{S}^*\text{min}$	Rel.Area %	Amount ppm	Type
1	2.90	Fluoride	0.149	0.018	0.79	0.088	BMB
2	4.25	Chloride	5.060	0.845	37.40	4.228	BMB
3	6.69	Bromide	0.050	0.013	0.58	0.195	BMB
4	7.87	Nitrate as [N]	0.560	0.179	7.93	0.469	BMB
5	11.98	Sulfate	2.684	1.204	53.30	8.796	BMB
Total:			8.503	2.259	100.00	13.776	

modified on: n.a.

By: OLH/EMW/JSW

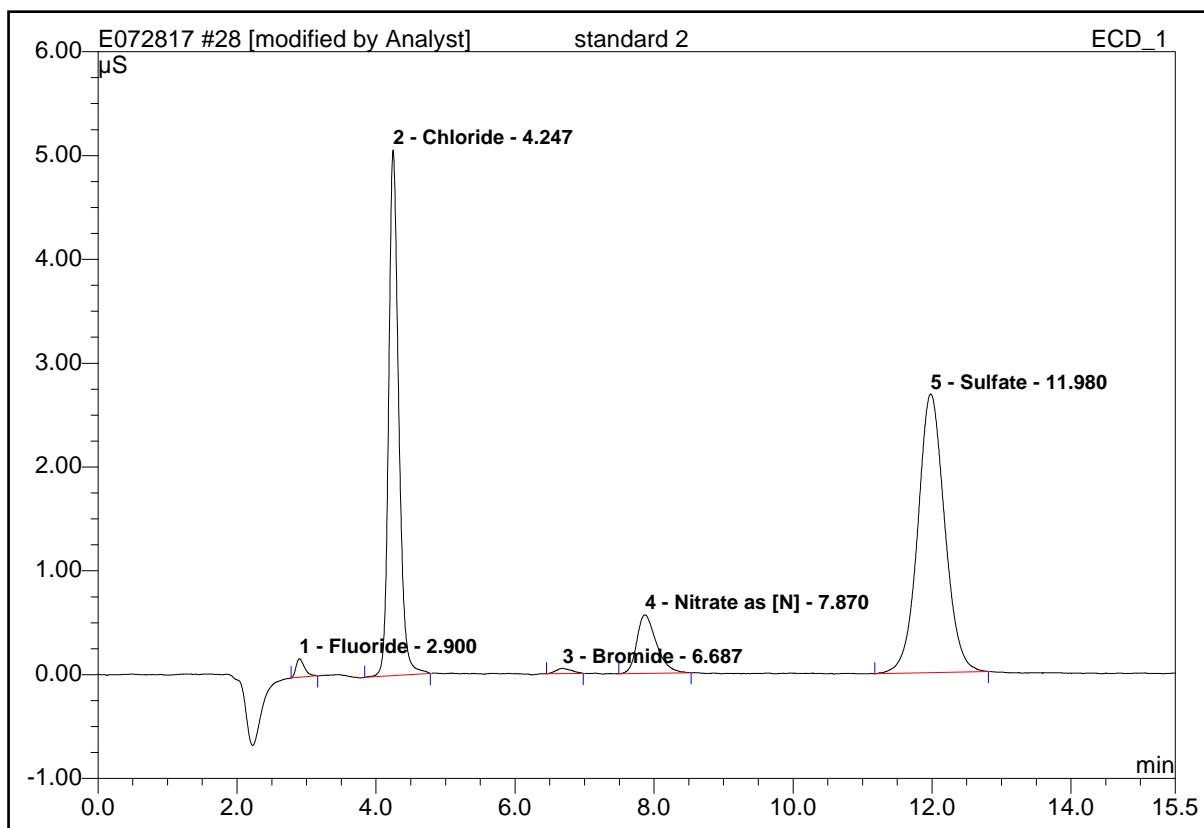
* = Manual integrations due to peak, rider or baseline error.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

28 standard 2

Sample Name:	standard 2	Injection Volume:	20.0
Vial Number:	22	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 8:59	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	2.90	Fluoride	0.177	0.025	1.09	0.098	BMB*
2	4.25	Chloride	5.064	0.848	37.30	4.159	BMB*
3	6.69	Bromide	0.050	0.013	0.57	0.195	BMB
4	7.87	Nitrate as [N]	0.564	0.184	8.07	0.473	BMB*
5	11.98	Sulfate	2.684	1.204	52.95	8.744	BMB
Total:			8.538	2.274	100.00	13.670	

modified on: 07.24.17 11:55 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

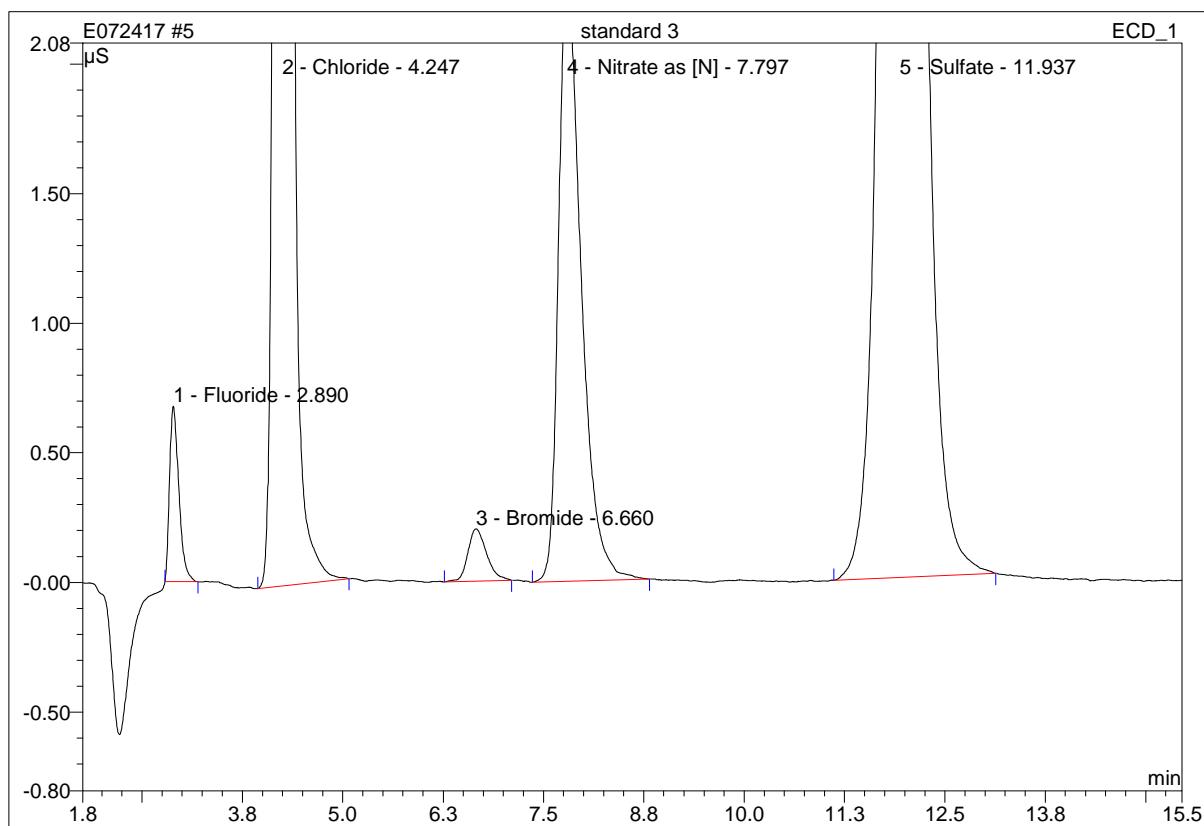
M = Main

R = Rider

BMB = This peak type is for resolved peaks.

5 standard 3

Sample Name:	standard 3	Injection Volume:	20.0
Vial Number:	22	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 9:17	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area $\mu\text{S}^*\text{min}$	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	0.677	0.091	0.91	0.394	BMB
2	4.25	Chloride	23.877	3.808	38.16	18.187	BMB
3	6.66	Bromide	0.202	0.055	0.55	0.793	BMB
4	7.80	Nitrate as [N]	2.352	0.766	7.68	1.945	BMB
5	11.94	Sulfate	11.962	5.261	52.71	36.954	BMB
Total:			39.070	9.981	100.00	58.273	

modified on: n.a.

By: OLH/EMW/JSW

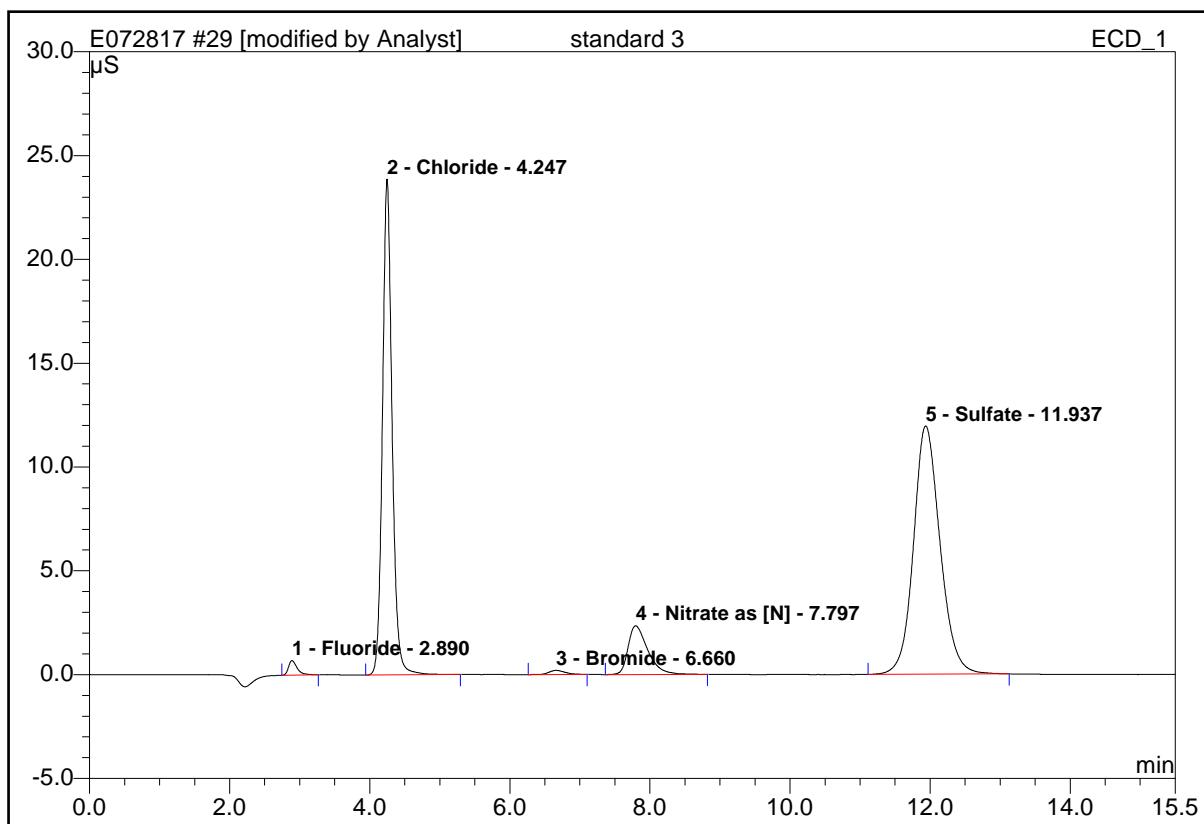
* = Manual integrations due to peak, rider or baseline error.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

29 standard 3

Sample Name:	standard 3	Injection Volume:	20.0
Vial Number:	22	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 9:17	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area $\mu\text{S}^*\text{min}$	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	0.701	0.099	0.99	0.394	BMB*
2	4.25	Chloride	23.881	3.818	38.19	18.152	BMB*
3	6.66	Bromide	0.202	0.055	0.55	0.791	BMB
4	7.80	Nitrate as [N]	2.352	0.766	7.66	1.939	BMB
5	11.94	Sulfate	11.962	5.261	52.61	36.926	BMB
Total:			39.098	9.999	100.00	58.202	

modified on: 07.24.17 11:55 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

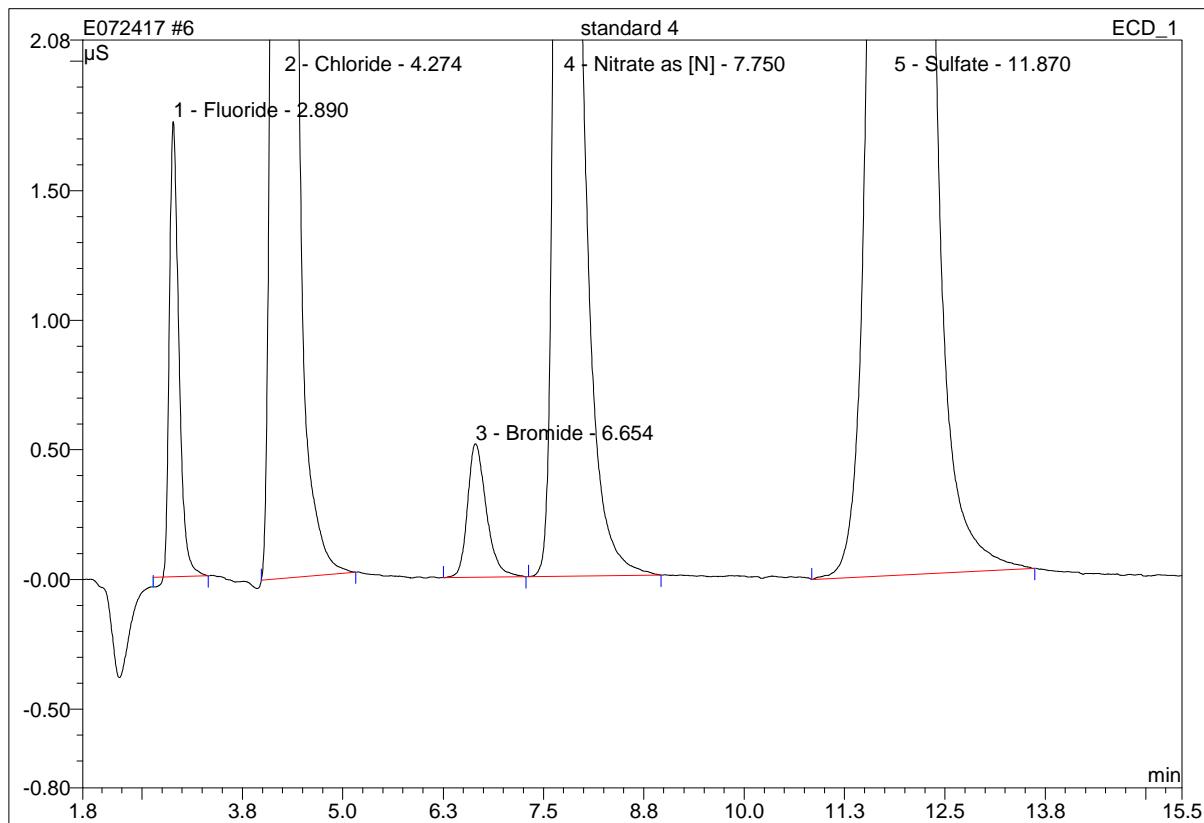
M = Main

R = Rider

BMB = This peak type is for resolved peaks.

6 standard 4

Sample Name:	standard 4	Injection Volume:	20.0
Vial Number:	21	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 9:35	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area $\mu\text{S}^*\text{min}$	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	1.757	0.239	0.85	0.986	MB
2	4.27	Chloride	68.015	10.902	38.77	49.873	BMB
3	6.65	Bromide	0.515	0.140	0.50	2.015	BMB
4	7.75	Nitrate as [N]	6.351	2.039	7.25	4.968	BMB
5	11.87	Sulfate	33.906	14.798	52.63	99.132	BMB
Total:			110.543	28.118	100.00	156.973	

modified on: n.a.

By: OLH/EMW/JSW

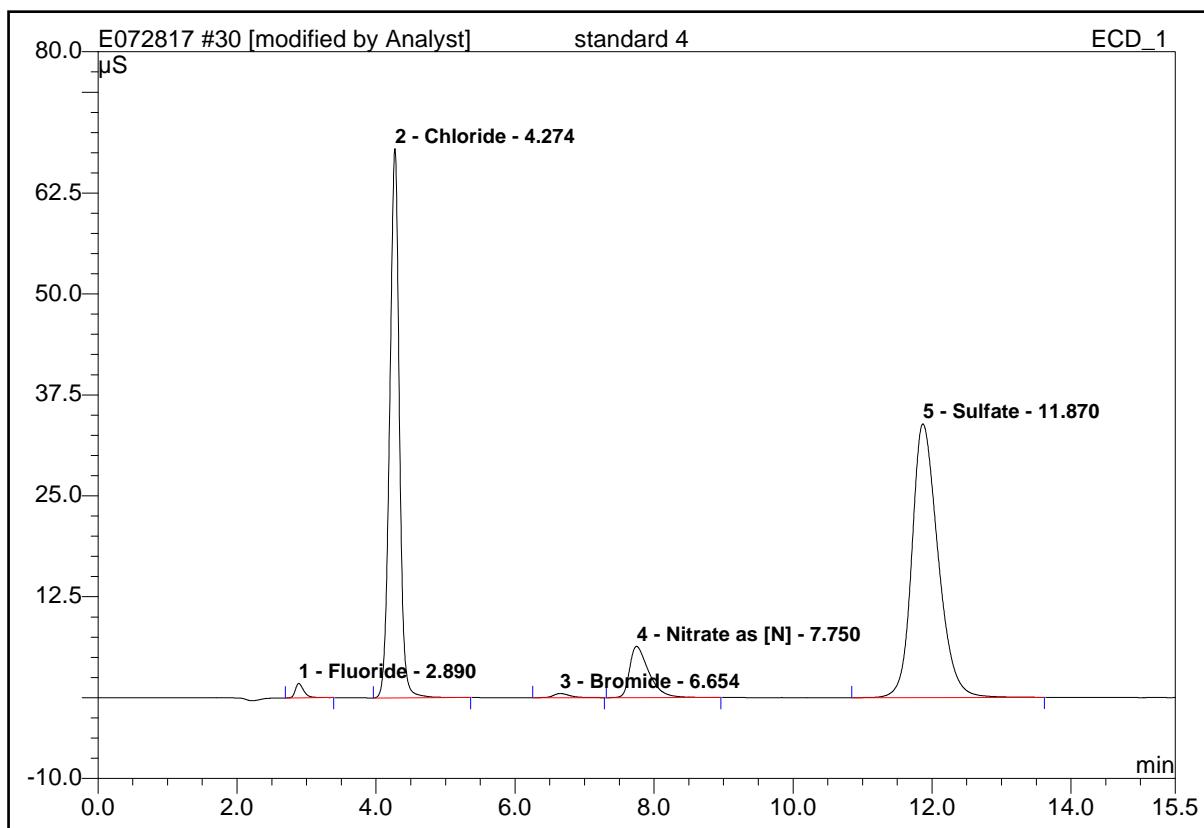
* = Manual integrations due to peak, rider or baseline error.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

30 standard 4

Sample Name:	standard 4	Injection Volume:	20.0
Vial Number:	21	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 9:35	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	1.781	0.252	0.90	0.991	BMB*
2	4.27	Chloride	68.039	10.929	38.81	49.902	BMB*
3	6.65	Bromide	0.515	0.140	0.50	2.013	BMB
4	7.75	Nitrate as [N]	6.351	2.039	7.24	4.963	BMB
5	11.87	Sulfate	33.906	14.798	52.55	99.135	BMB
Total:			110.592	28.159	100.00	157.004	

modified on: 07.24.17 11:55 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

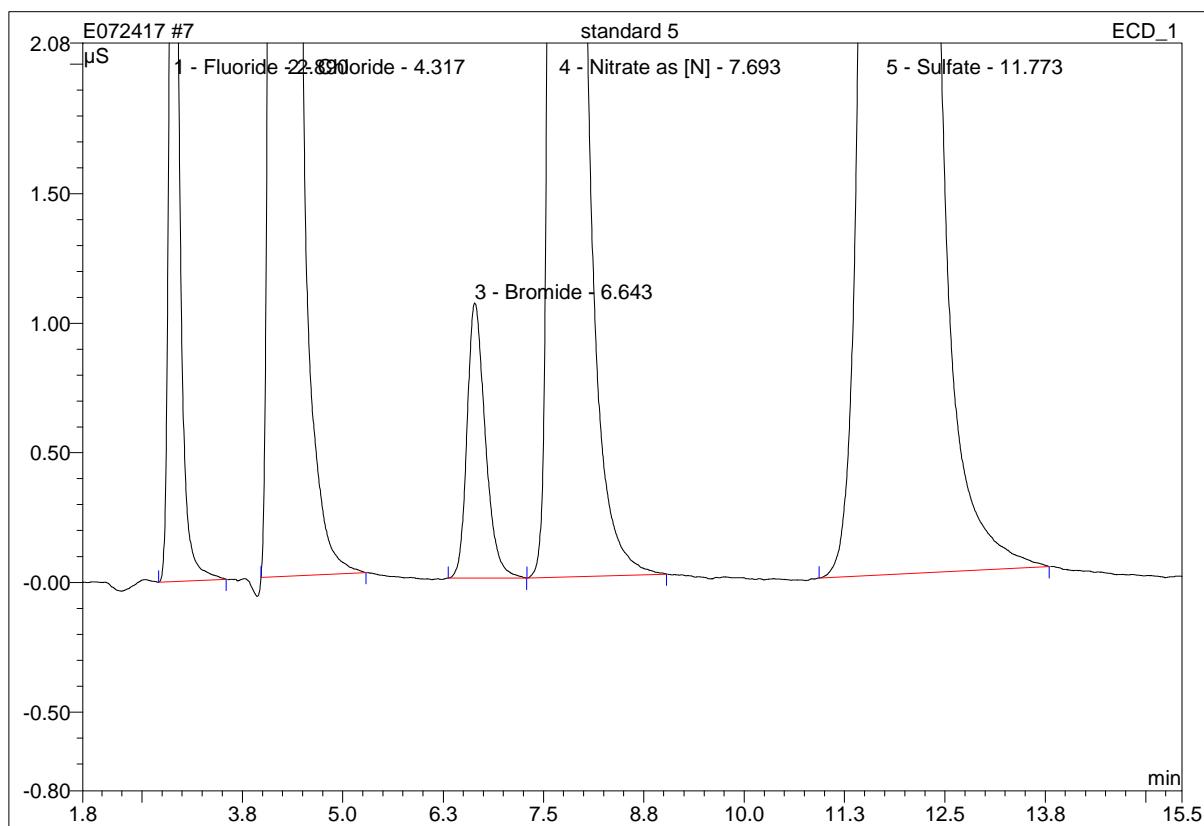
M = Main

R = Rider

BMB = This peak type is for resolved peaks.

7 standard 5

Sample Name:	standard 5	Injection Volume:	20.0
Vial Number:	21	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 9:53	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	3.665	0.525	0.84	2.060	BMB
2	4.32	Chloride	140.273	24.201	38.54	104.007	BMB
3	6.64	Bromide	1.062	0.280	0.45	4.009	BMB
4	7.69	Nitrate as [N]	14.059	4.456	7.10	10.168	BMB
5	11.77	Sulfate	74.169	33.326	53.08	207.483	BMB
Total:			233.227	62.788	100.00	327.727	

modified on: n.a.

By: OLH/EMW/JSW

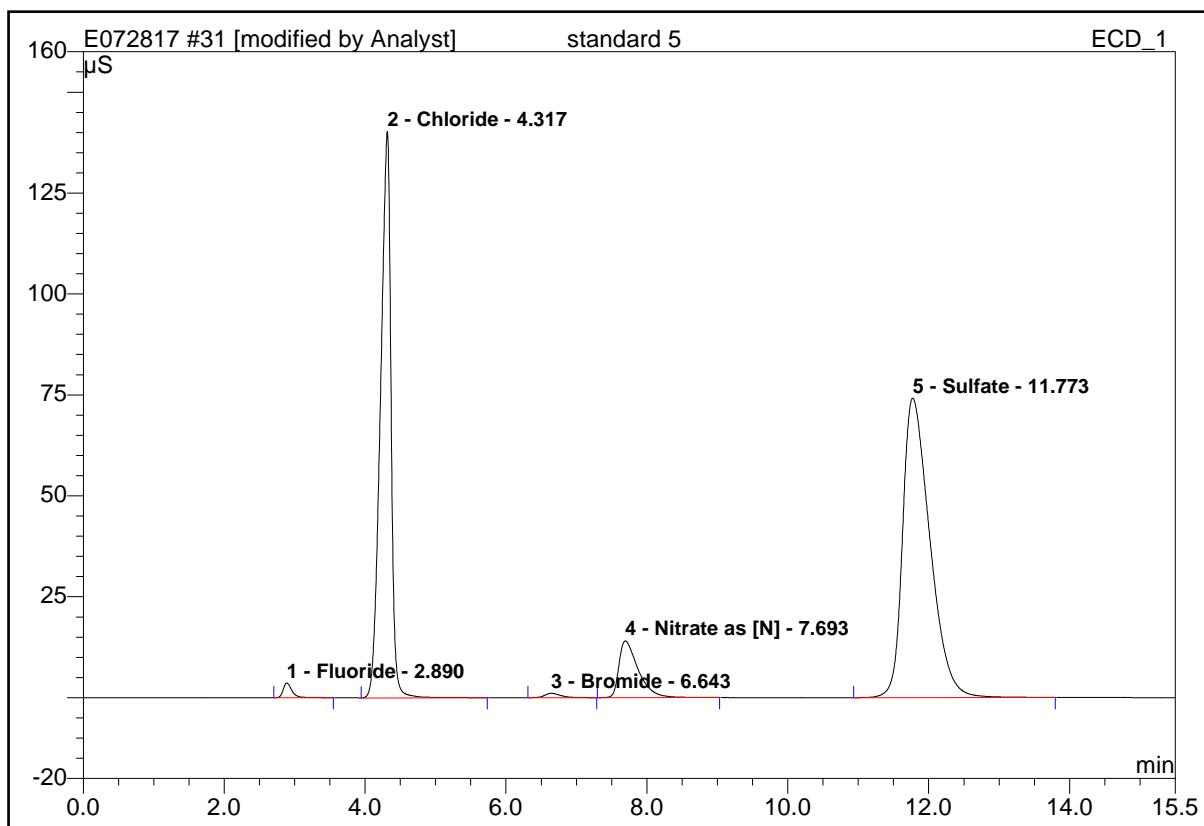
* = Manual integrations due to peak, rider or baseline error.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

31 standard 5

Sample Name:	standard 5	Injection Volume:	20.0
Vial Number:	21	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 9:53	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	3.665	0.525	0.84	2.021	BMB
2	4.32	Chloride	140.333	24.278	38.62	104.170	BMB*
3	6.64	Bromide	1.062	0.280	0.45	4.015	BMB
4	7.69	Nitrate as [N]	14.059	4.456	7.09	10.168	BMB
5	11.77	Sulfate	74.169	33.326	53.01	207.491	BMB
Total:			233.288	62.866	100.00	327.865	

modified on: 07.24.17 11:55 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

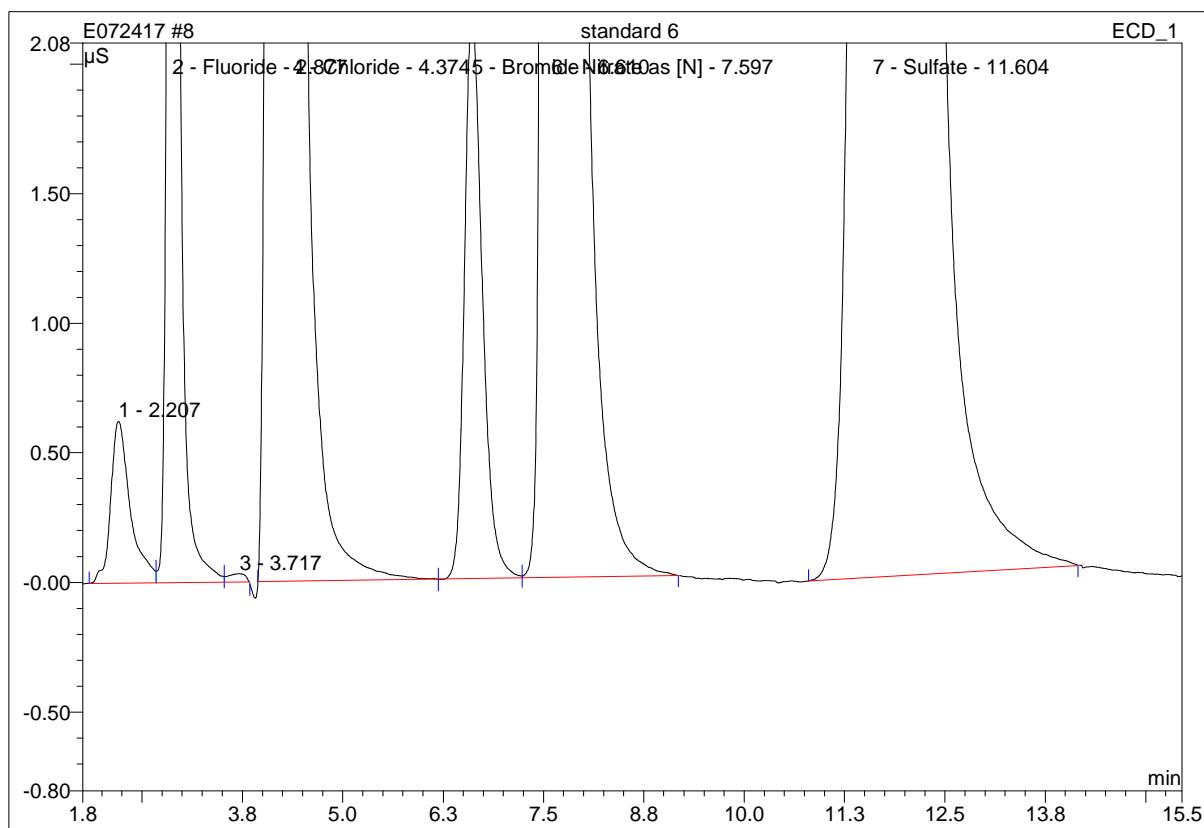
M = Main

R = Rider

BMB = This peak type is for resolved peaks.

8 standard 6

Sample Name:	standard 6	Injection Volume:	20.0
Vial Number:	20	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 10:11	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.21	n.a.	0.625	0.177	0.13	n.a.	BM
2	2.88	Fluoride	7.363	1.098	0.82	3.978	M
3	3.72	n.a.	0.032	0.008	0.01	n.a.	M
4	4.37	Chloride	249.395	50.974	37.98	198.482	BM
5	6.61	Bromide	2.197	0.565	0.42	7.993	M
6	7.60	Nitrate as [N]	30.938	9.771	7.28	19.941	MB
7	11.60	Sulfate	146.202	71.635	53.37	397.316	BMB
Total:			436.752	134.228	100.00	627.710	

modified on: n.a.

By: OLH/EMW/JSW

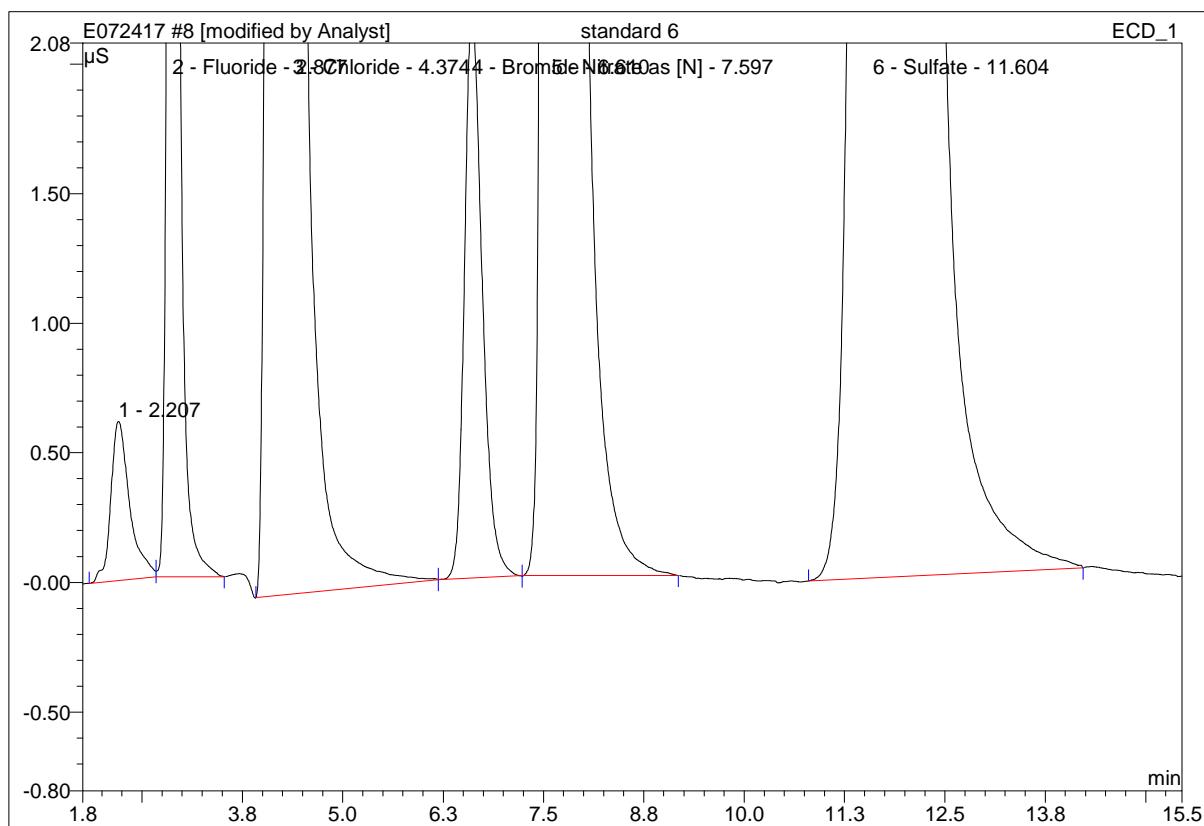
close up/Integration

Chromleon (c) Dionex 1996-2006
Version 6.80 SR15 Build 4656 (243203)

* = Manual integrations due to peak, rider or baseline error.
B = Baseline with direct contact on the left or right side of peak.
b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R= Rider
BMB = This peak type is for resolved peaks.

8 standard 6

Sample Name:	standard 6	Injection Volume:	20.0
Vial Number:	20	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 10:11	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.21	n.a.	0.614	0.168	0.12	n.a.	BM *
2	2.88	Fluoride	7.341	1.080	0.80	3.993	MB*
3	4.37	Chloride	249.444	51.045	38.02	198.413	BMB*
4	6.61	Bromide	2.195	0.562	0.42	7.991	bM *
5	7.60	Nitrate as [N]	30.931	9.762	7.27	19.942	MB*
6	11.60	Sulfate	146.205	71.653	53.37	397.316	BMB*
Total:			436.730	134.269	100.00	627.655	

modified on: 07.24.17 11:56 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

close up/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR15 Build 4656 (243203)

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

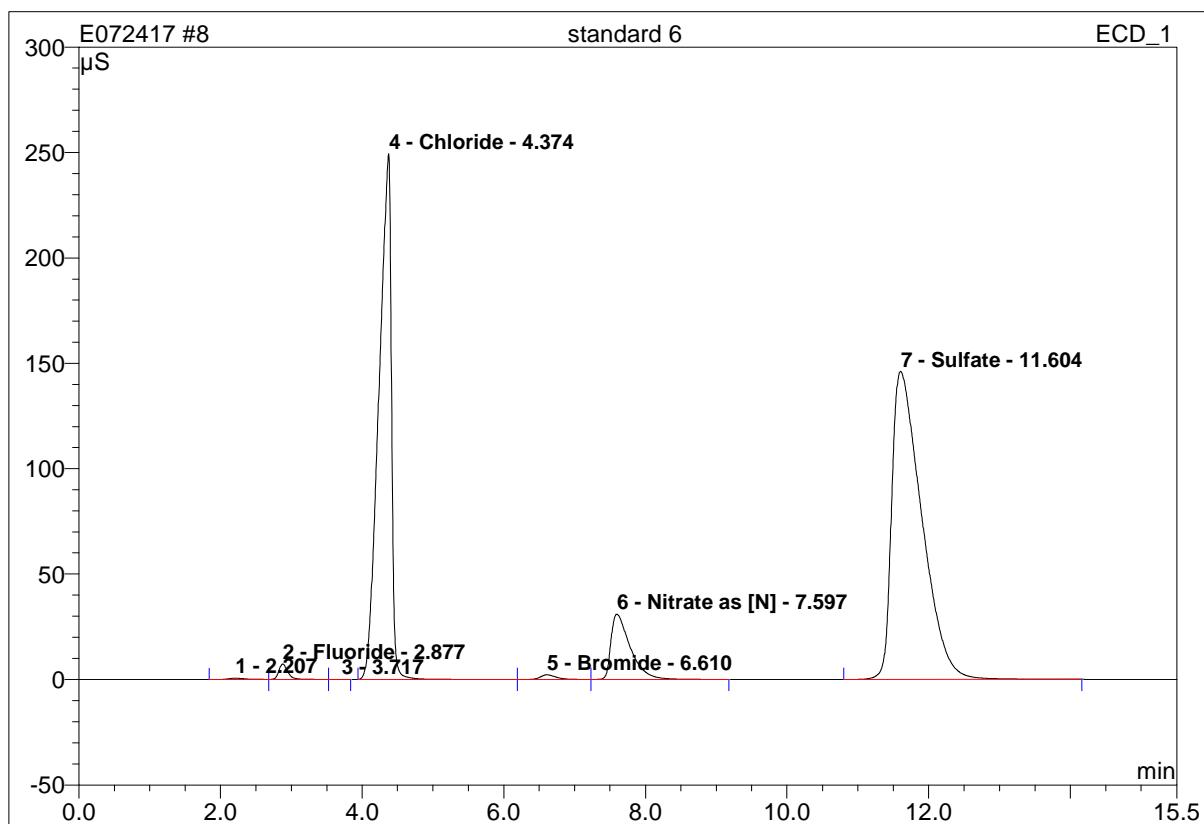
M = Main

R= Rider

BMB = This peak type is for resolved peaks.

8 standard 6

Sample Name:	standard 6	Injection Volume:	20.0
Vial Number:	20	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 10:11	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	2.21	n.a.	0.625	0.177	0.13	n.a.	BM
2	2.88	Fluoride	7.363	1.098	0.82	3.978	M
3	3.72	n.a.	0.032	0.008	0.01	n.a.	M
4	4.37	Chloride	249.395	50.974	37.98	198.482	BM
5	6.61	Bromide	2.197	0.565	0.42	7.993	M
6	7.60	Nitrate as [N]	30.938	9.771	7.28	19.941	MB
7	11.60	Sulfate	146.202	71.635	53.37	397.316	BMB
Total:			436.752	134.228	100.00	627.710	

modified on: n.a.

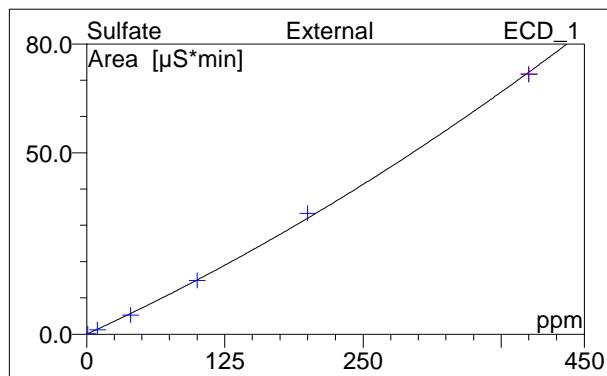
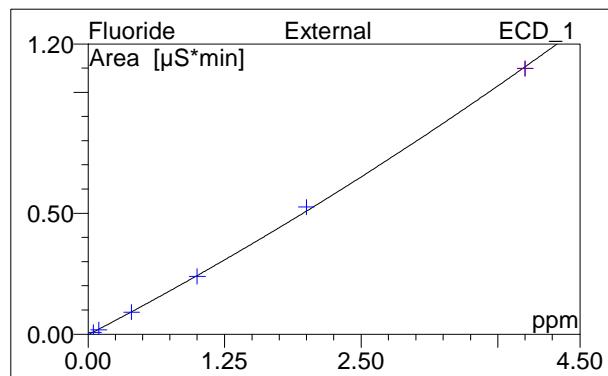
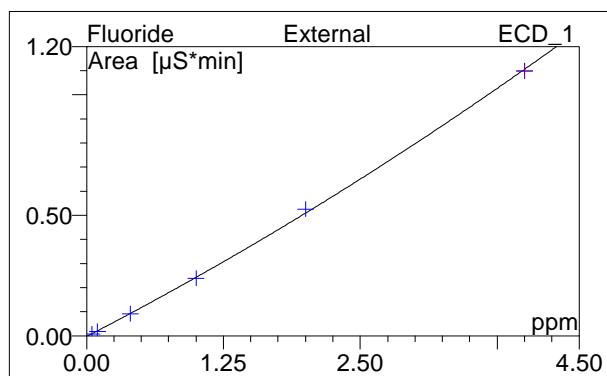
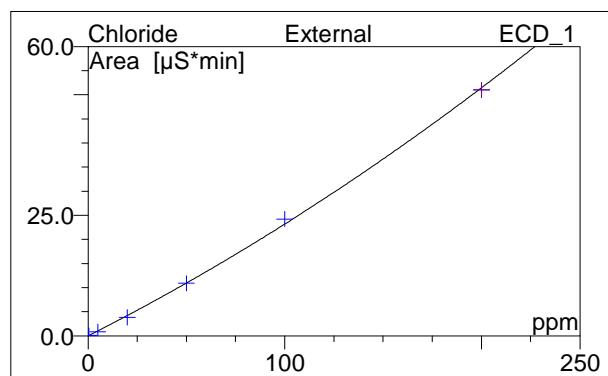
By: OLH/EMW/JSW

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8 standard 6

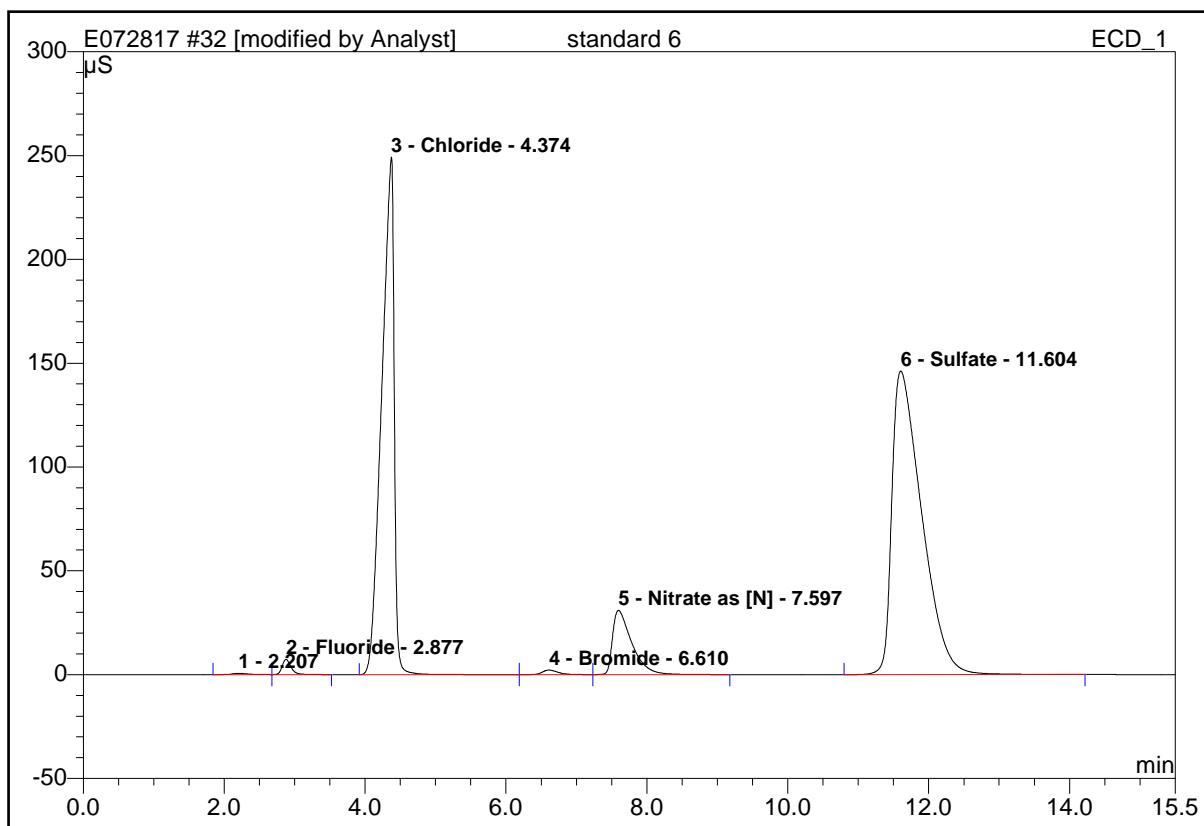
Sample Name:	standard 6	Injection Volume:	20.0
Vial Number:	20	Channel:	ECD_1
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 10:11	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Cal.Type	Points	Coeff.Det. %	Offset %	Slope	Curve
1	2.21	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	2.88	Fluoride	XA0QOff	6	99.9058	-0.0029	0.2347	0.0106
3	3.72	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	4.37	Chloride	XA0QOff	7	99.8803	-0.0329	0.2066	0.0003
5	6.61	Bromide	XA0QOff	6	99.9926	-0.0005	0.0693	0.0002
6	7.60	Nitrate as [N]	XA0QOff	6	99.9820	-0.0022	0.3846	0.0053
7	11.60	Sulfate	XA0QOff	6	99.9094	-0.0294	0.1393	0.0001
Average:					99.9340	-0.0136	0.2069	0.0033

32 standard 6

Sample Name:	standard 6	Injection Volume:	20.0
Vial Number:	20	Channel:	IC5
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 10:11	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.21	n.a.	0.614	0.168	0.12	n.a.	BM *
2	2.88	Fluoride	7.341	1.080	0.80	3.993	MB*
3	4.37	Chloride	249.444	51.045	38.02	198.413	BMB*
4	6.61	Bromide	2.195	0.562	0.42	7.991	bM *
5	7.60	Nitrate as [N]	30.931	9.762	7.27	19.942	MB*
6	11.60	Sulfate	146.205	71.653	53.37	397.316	BMB*
Total:			436.730	134.269	100.00	627.655	

modified on: 07.24.17 11:56 By: OLH/EMW/JSW

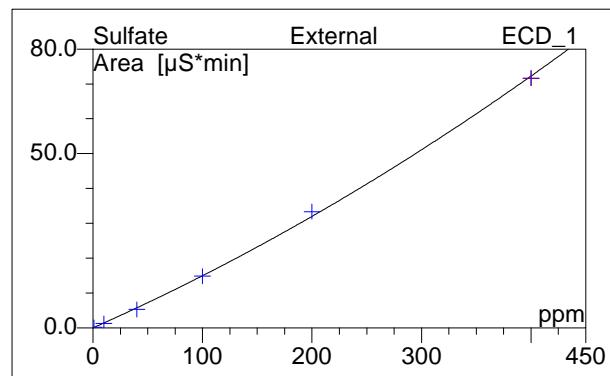
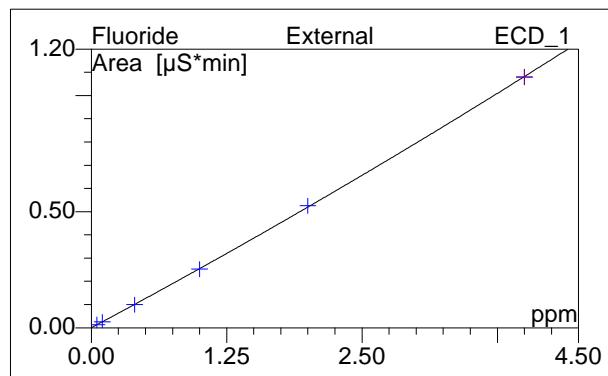
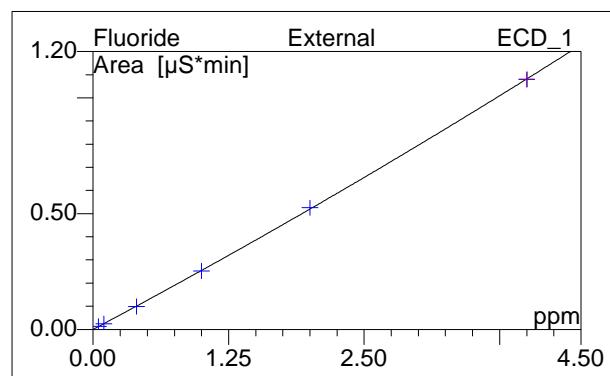
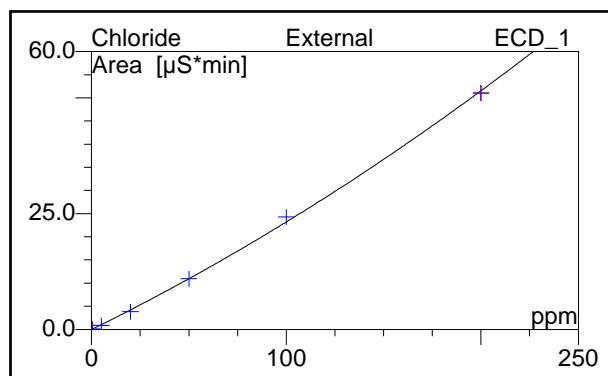
* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.

32 standard 6

Sample Name:	standard 6	Injection Volume:	20.0
Vial Number:	20	Channel:	ECD_1
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/24/2017 10:11	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Cal.Type	Points	Coeff.Det. %	Offset %	Slope	Curve
1	2.21	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	2.88	Fluoride	XA0QOff	6	99.9916	0.0003	0.2491	0.0053
3	4.37	Chloride	XA0QOff	6	99.8735	-0.0151	0.2065	0.0003
4	6.61	Bromide	XA0QOff	6	99.9918	-0.0005	0.0696	0.0001
5	7.60	Nitrate as [N]	XA0QOff	6	99.9812	0.0005	0.3847	0.0053
6	11.60	Sulfate	XA0QOff	6	99.9097	-0.0209	0.1392	0.0001
Average:					99.9496	-0.0072	0.2098	0.0022



Laboratories, Inc.

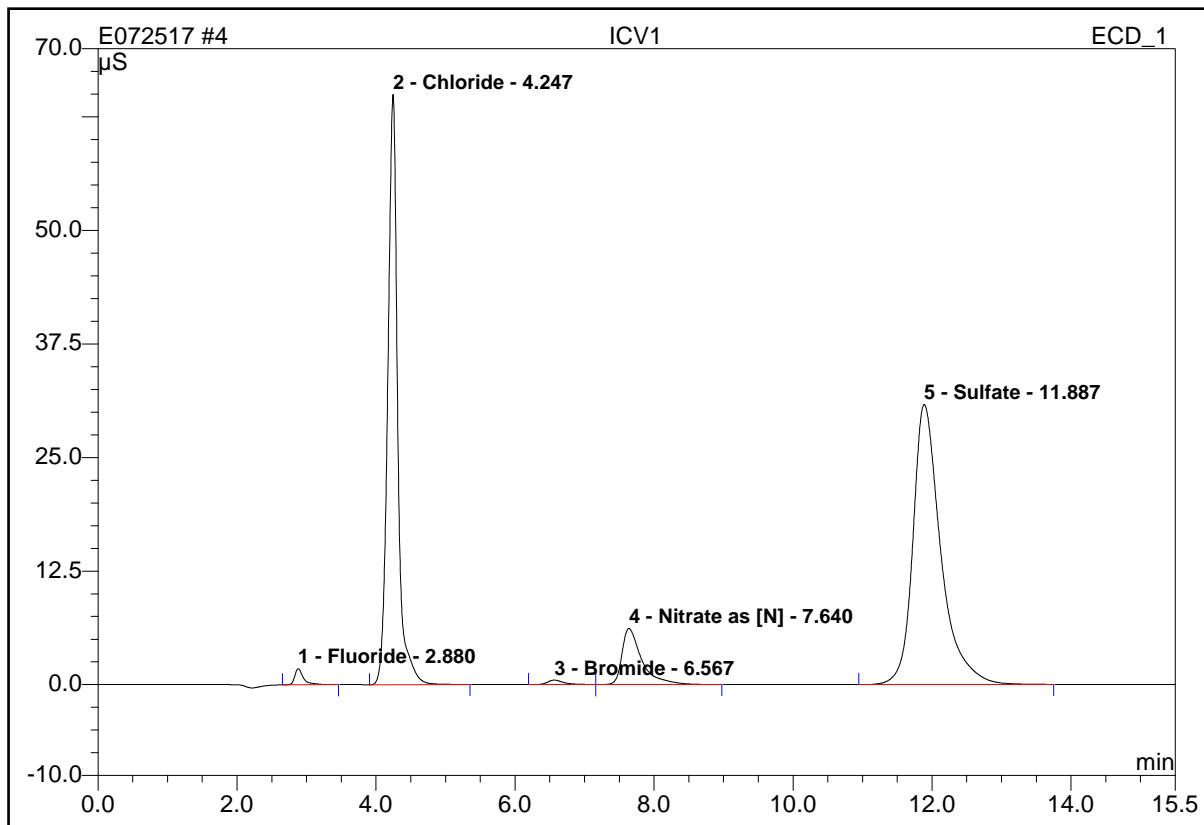
Environmental Testing Laboratory Since 1949



Raw Data - ICV

4 ICV1

Sample Name:	ICV1	Injection Volume:	20.0
Vial Number:	19	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 12:36	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area $\mu\text{S}^*\text{min}$	Rel.Area %	Amount ppm	Type
1	2.88	Fluoride	1.773	0.257	0.93	1.008	BMB
2	4.25	Chloride	64.992	10.728	39.01	49.035	BMB
3	6.57	Bromide	0.498	0.139	0.50	1.998	BM
4	7.64	Nitrate as [N]	6.163	2.038	7.41	4.960	MB
5	11.89	Sulfate	30.831	14.342	52.15	96.275	BMB
Total:			104.258	27.503	100.00	153.275	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main

R = Rider

BMB = This peak type is for resolved peaks.



Laboratories, Inc.

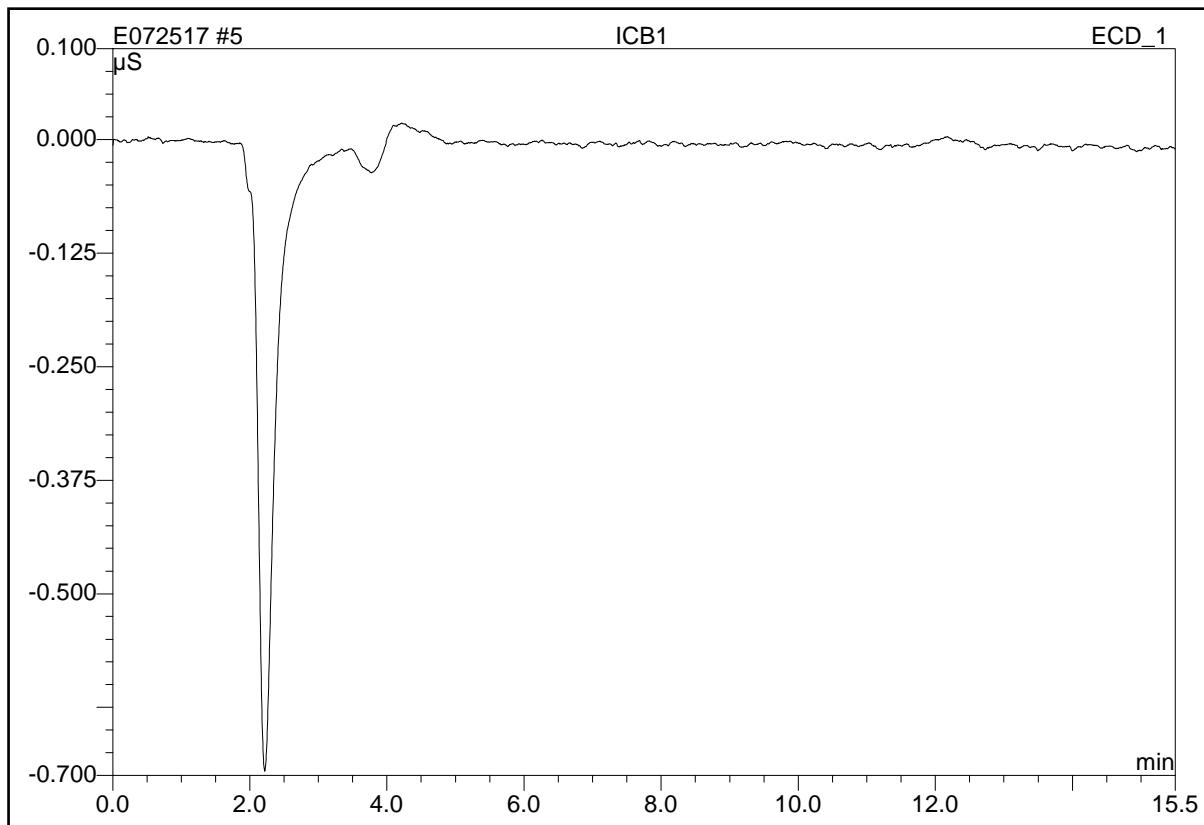
Environmental Testing Laboratory Since 1949



Raw Data - ICB

5 ICB1

Sample Name:	ICB1	Injection Volume:	20.0
Vial Number:	19	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 12:54	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

modified on: n.a. By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main

R = Rider

BMB = This peak type is for resolved peaks.



Laboratories, Inc.

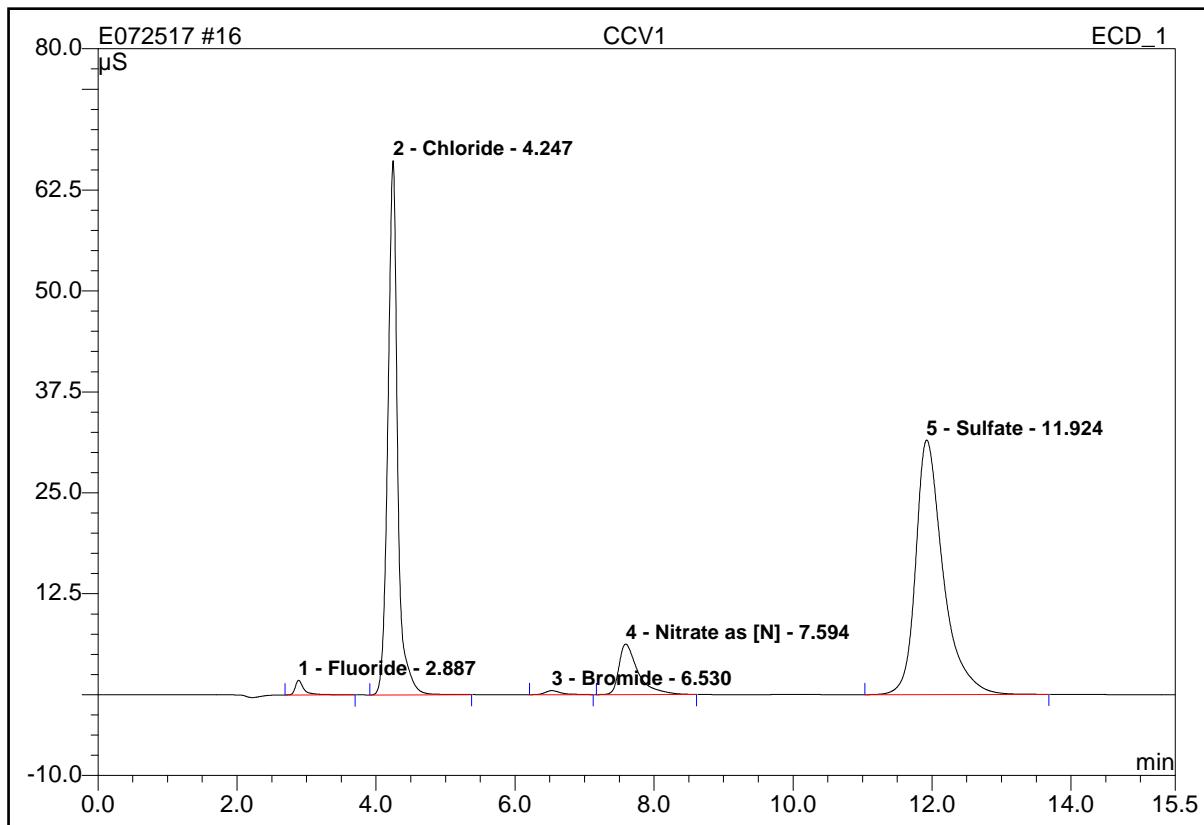
Environmental Testing Laboratory Since 1949



Raw Data - CCV

16 CCV1

Sample Name:	CCV1	Injection Volume:	20.0
Vial Number:	17	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 16:11	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	1.811	0.265	0.96	1.041	BMB
2	4.25	Chloride	66.177	10.697	38.84	48.903	BMB
3	6.53	Bromide	0.499	0.131	0.48	1.885	BMB
4	7.59	Nitrate as [N]	6.257	1.998	7.26	4.869	BMB
5	11.92	Sulfate	31.535	14.447	52.46	96.932	BMB
Total:			106.279	27.538	100.00	153.630	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

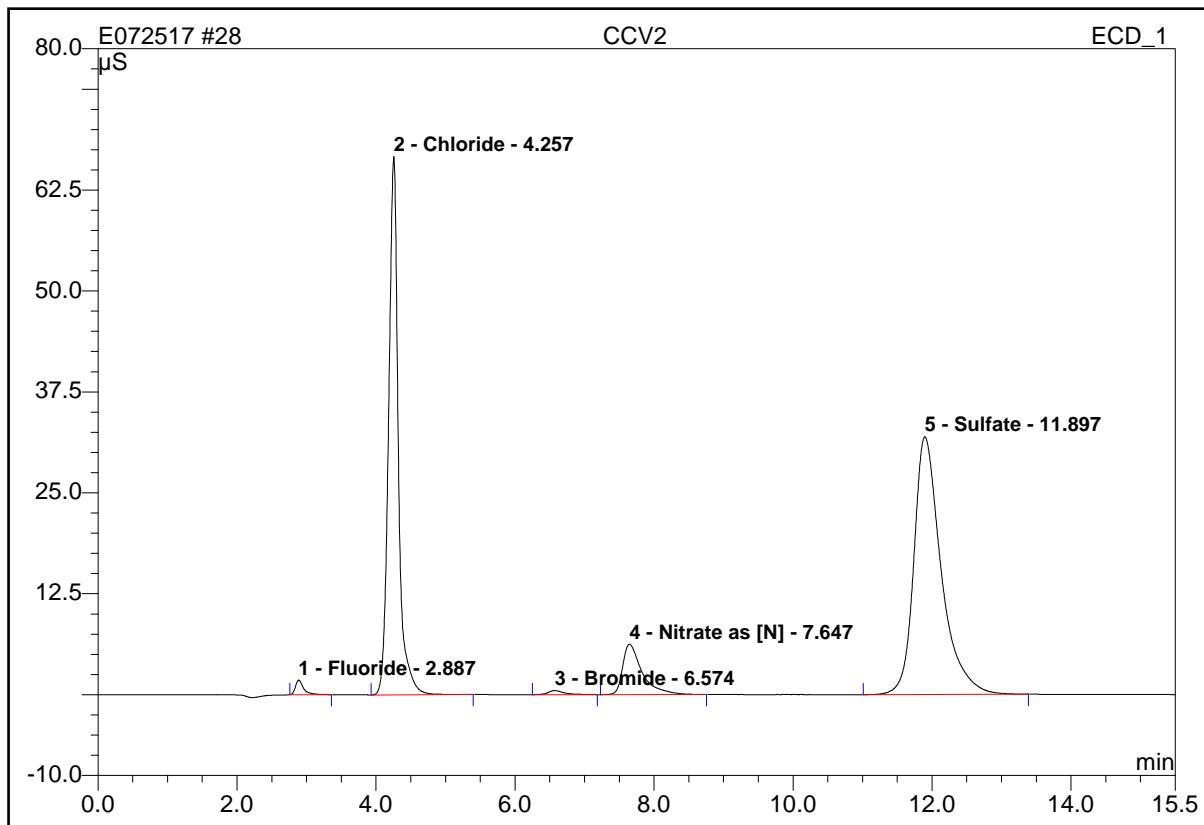
M = Main

R = Rider

BMB = This peak type is for resolved peaks.

28 CCV2

Sample Name:	CCV2	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 19:45	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	1.806	0.244	0.88	0.959	BMB
2	4.26	Chloride	66.670	10.804	38.91	49.363	BMB
3	6.57	Bromide	0.503	0.135	0.48	1.937	BMB
4	7.65	Nitrate as [N]	6.234	2.016	7.26	4.910	BMB
5	11.90	Sulfate	31.898	14.570	52.47	97.706	BMB
Total:			107.111	27.769	100.00	154.876	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

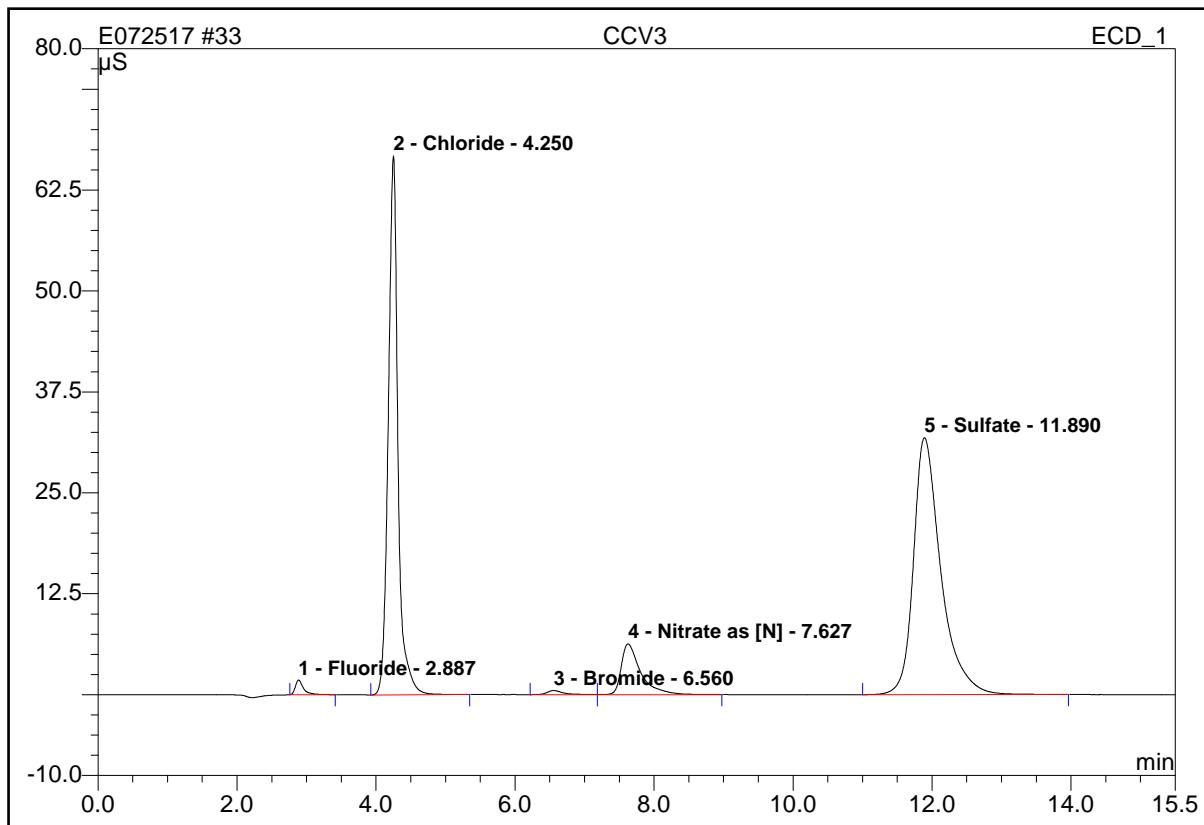
M = Main

R = Rider

BMB = This peak type is for resolved peaks.

33 CCV3

Sample Name:	CCV3	Injection Volume:	20.0
Vial Number:	20	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 21:15	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area $\mu\text{S}^*\text{min}$	Rel.Area %	Amount ppm	Type
1	2.89	Fluoride	1.815	0.245	0.88	0.963	BMB
2	4.25	Chloride	66.746	10.763	38.83	49.185	BMB
3	6.56	Bromide	0.506	0.134	0.48	1.926	BM
4	7.63	Nitrate as [N]	6.280	2.028	7.32	4.936	MB
5	11.89	Sulfate	31.809	14.546	52.48	97.554	BMB
Total:			107.155	27.715	100.00	154.563	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main

R = Rider

BMB = This peak type is for resolved peaks.



Laboratories, Inc.

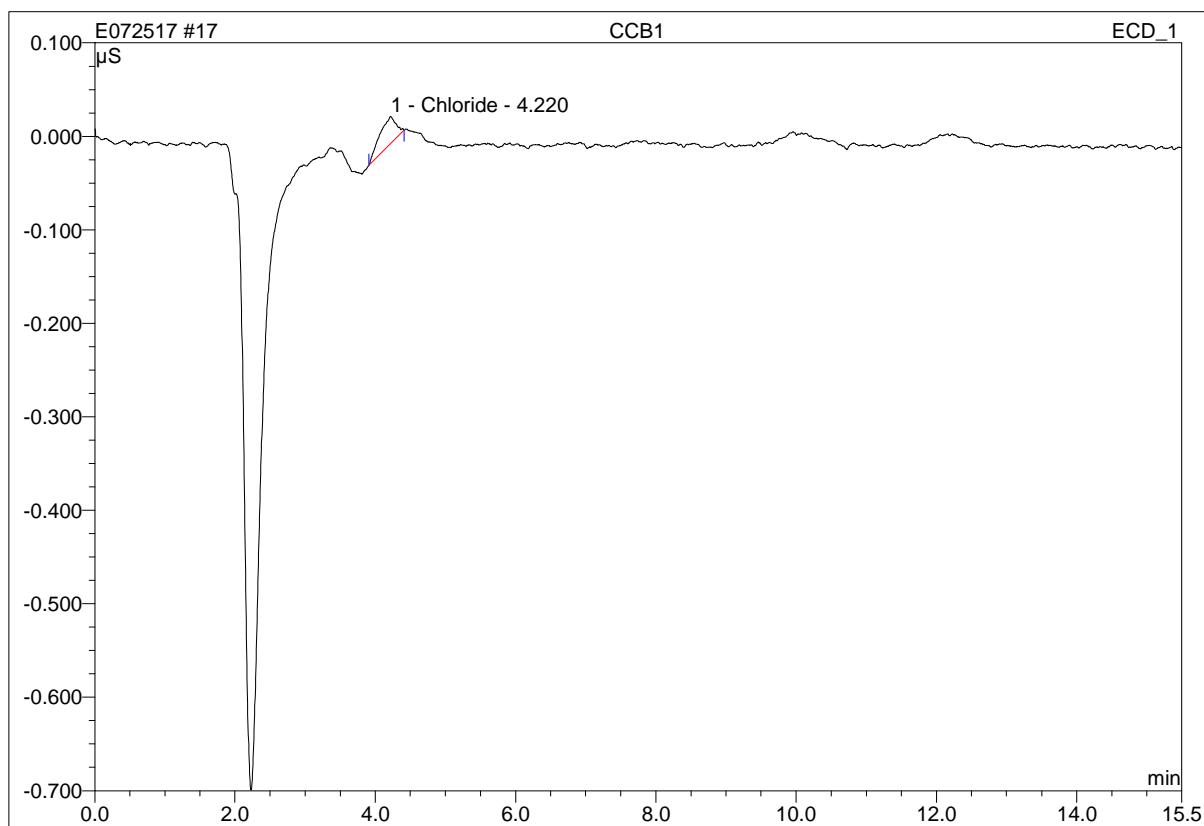
Environmental Testing Laboratory Since 1949



Raw Data - CCB

17 CCB1

Sample Name:	CCB1	Injection Volume:	20.0
Vial Number:	17	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 16:29	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	4.22	Chloride	0.029	0.008	100.00	0.113	BMB
Total:			0.029	0.008	100.00	0.113	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

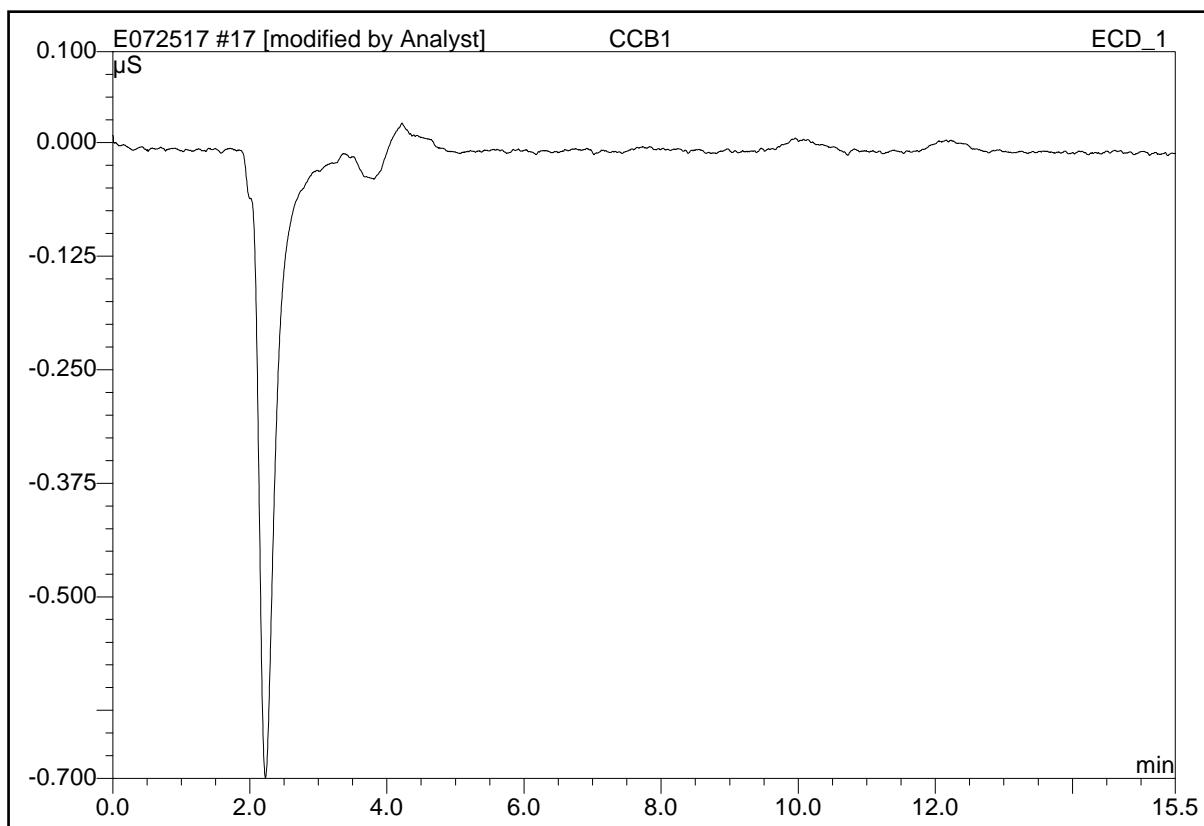
M = Main

R= Rider

BMB = This peak type is for resolved peaks.

17 CCB1

Sample Name:	CCB1	Injection Volume:	20.0
Vial Number:	17	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 16:29	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

modified on: 07.25.17 17:08 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

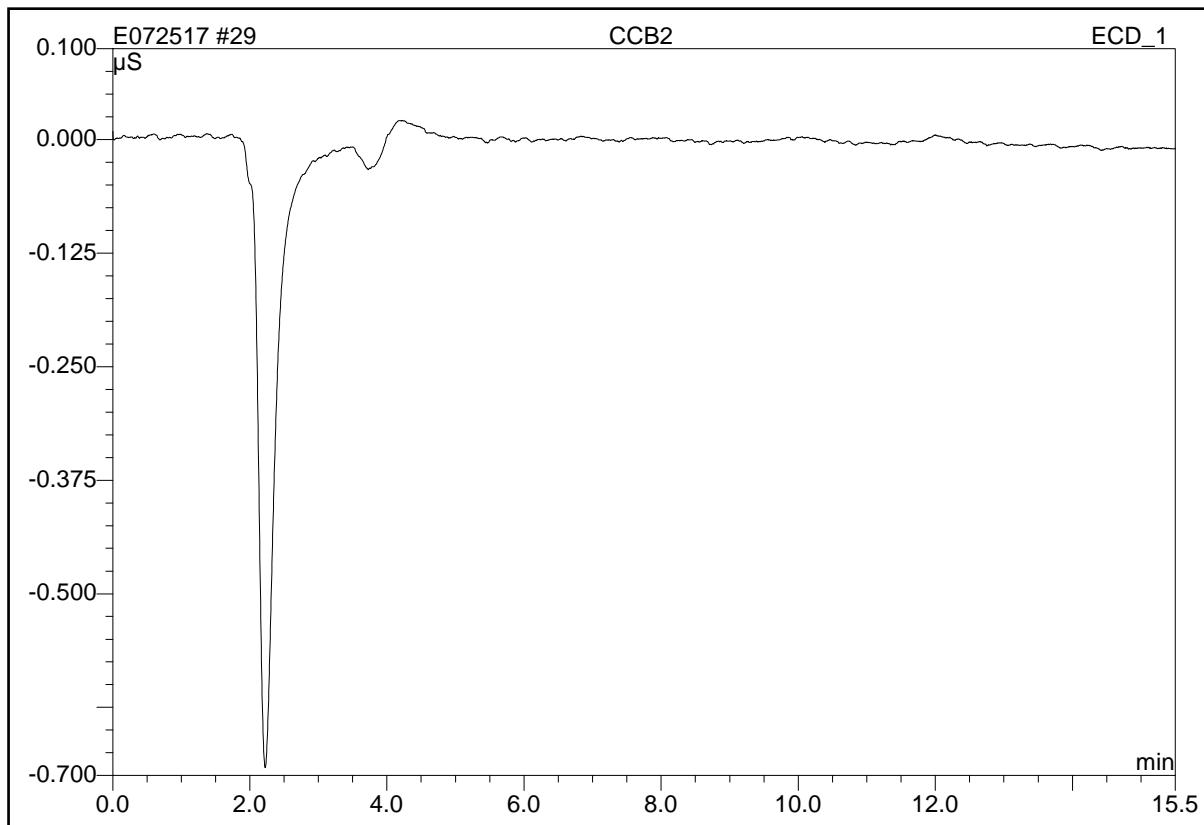
M = Main

R = Rider

BMB = This peak type is for resolved peaks.

29 CCB2

<i>Sample Name:</i>	CCB2	<i>Injection Volume:</i>	20.0
<i>Vial Number:</i>	18	<i>Channel:</i>	IC5
<i>Sample Type:</i>	unknown	<i>Wavelength:</i>	n.a.
<i>Control Program:</i>	IC5	<i>Bandwidth:</i>	n.a.
<i>Quantif. Method:</i>	IC5 ANION	<i>Dilution Factor:</i>	1.0000
<i>Recording Time:</i>	7/25/2017 20:03	<i>Sample Weight:</i>	1.0000
<i>Run Time (min):</i>	15.50	<i>Sample Amount:</i>	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

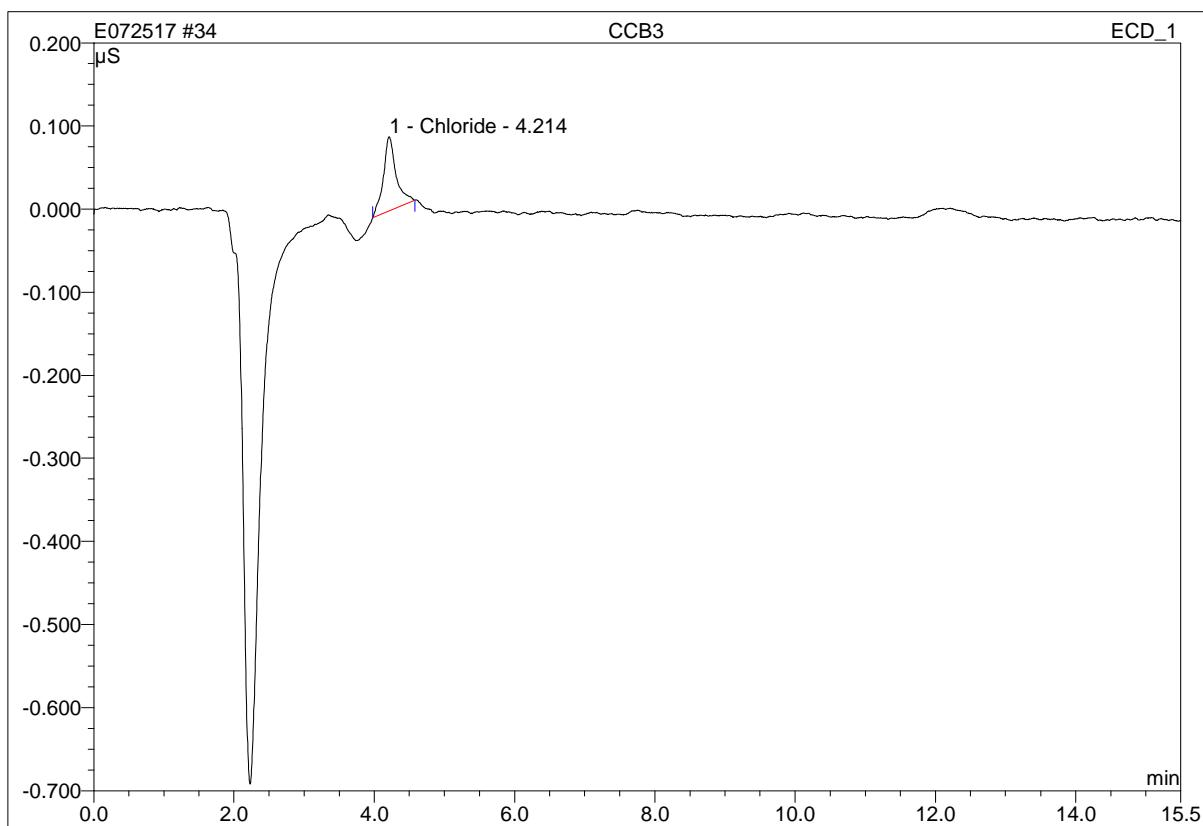
M = Main

R = Rider

BMB = This peak type is for resolved peaks.

34 CCB3

Sample Name:	CCB3	Injection Volume:	20.0
Vial Number:	20	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 21:33	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	4.21	Chloride	0.089	0.019	100.00	0.164	BMB
Total:			0.089	0.019	100.00	0.164	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

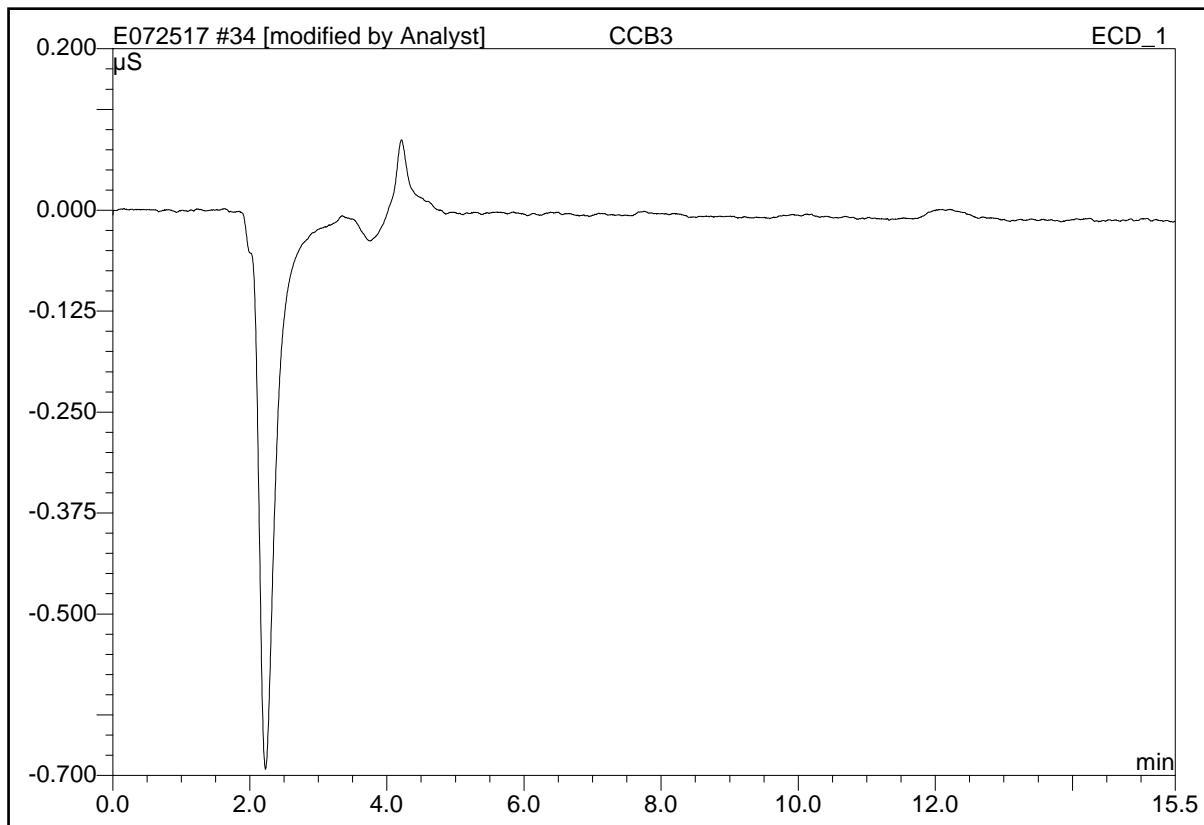
M = Main

R= Rider

BMB = This peak type is for resolved peaks.

34 CCB3

<i>Sample Name:</i>	CCB3	<i>Injection Volume:</i>	20.0
<i>Vial Number:</i>	20	<i>Channel:</i>	IC5
<i>Sample Type:</i>	unknown	<i>Wavelength:</i>	n.a.
<i>Control Program:</i>	IC5	<i>Bandwidth:</i>	n.a.
<i>Quantif. Method:</i>	IC5 ANION	<i>Dilution Factor:</i>	1.0000
<i>Recording Time:</i>	7/25/2017 21:33	<i>Sample Weight:</i>	1.0000
<i>Run Time (min):</i>	15.50	<i>Sample Amount:</i>	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

modified on: 07.25.17 22:00 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main

R = Rider

BMB = This peak type is for resolved peaks.



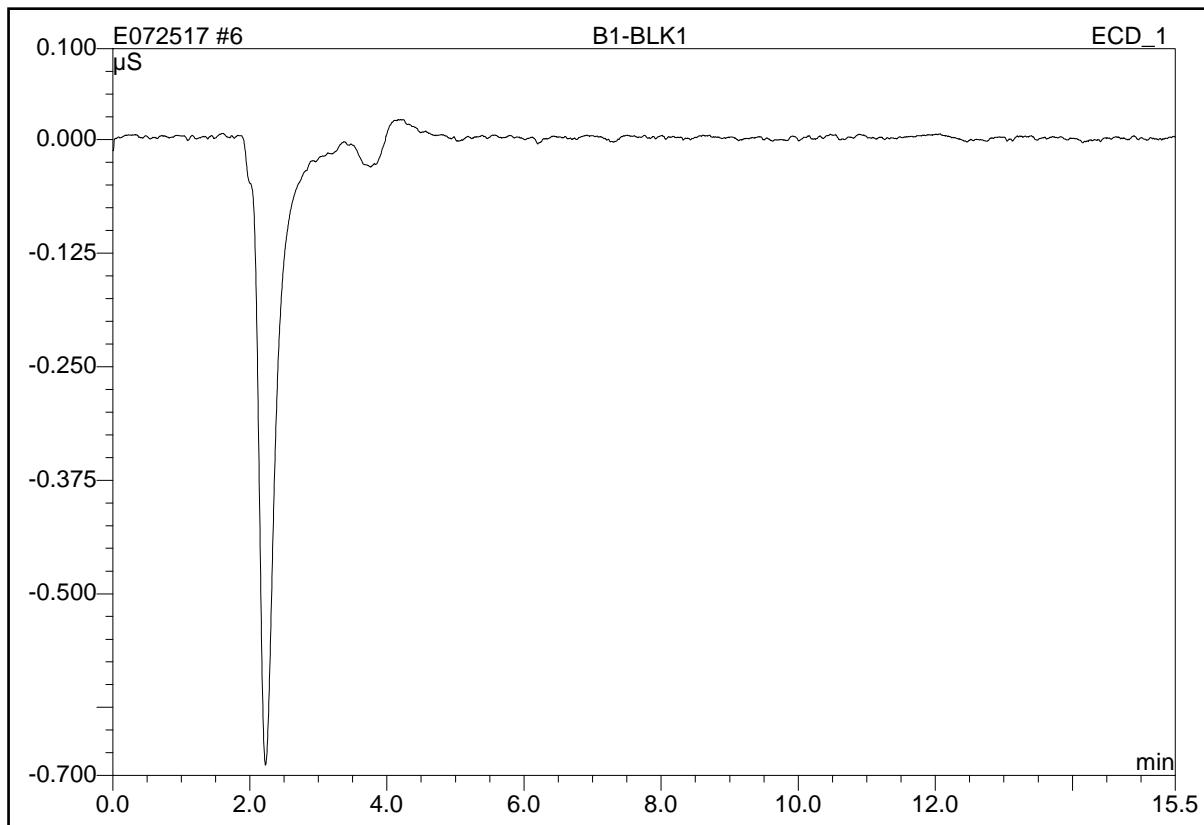
Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Raw Data - Method Blank

6 B1-BLK1

<i>Sample Name:</i>	B1-BLK1	<i>Injection Volume:</i>	20.0
<i>Vial Number:</i>	19	<i>Channel:</i>	IC5
<i>Sample Type:</i>	unknown	<i>Wavelength:</i>	n.a.
<i>Control Program:</i>	IC5	<i>Bandwidth:</i>	n.a.
<i>Quantif. Method:</i>	IC5 ANION	<i>Dilution Factor:</i>	1.0000
<i>Recording Time:</i>	7/25/2017 13:12	<i>Sample Weight:</i>	1.0000
<i>Run Time (min):</i>	15.50	<i>Sample Amount:</i>	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
Total:			0.000	0.000	0.00	0.000	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main

R = Rider

BMB = This peak type is for resolved peaks.



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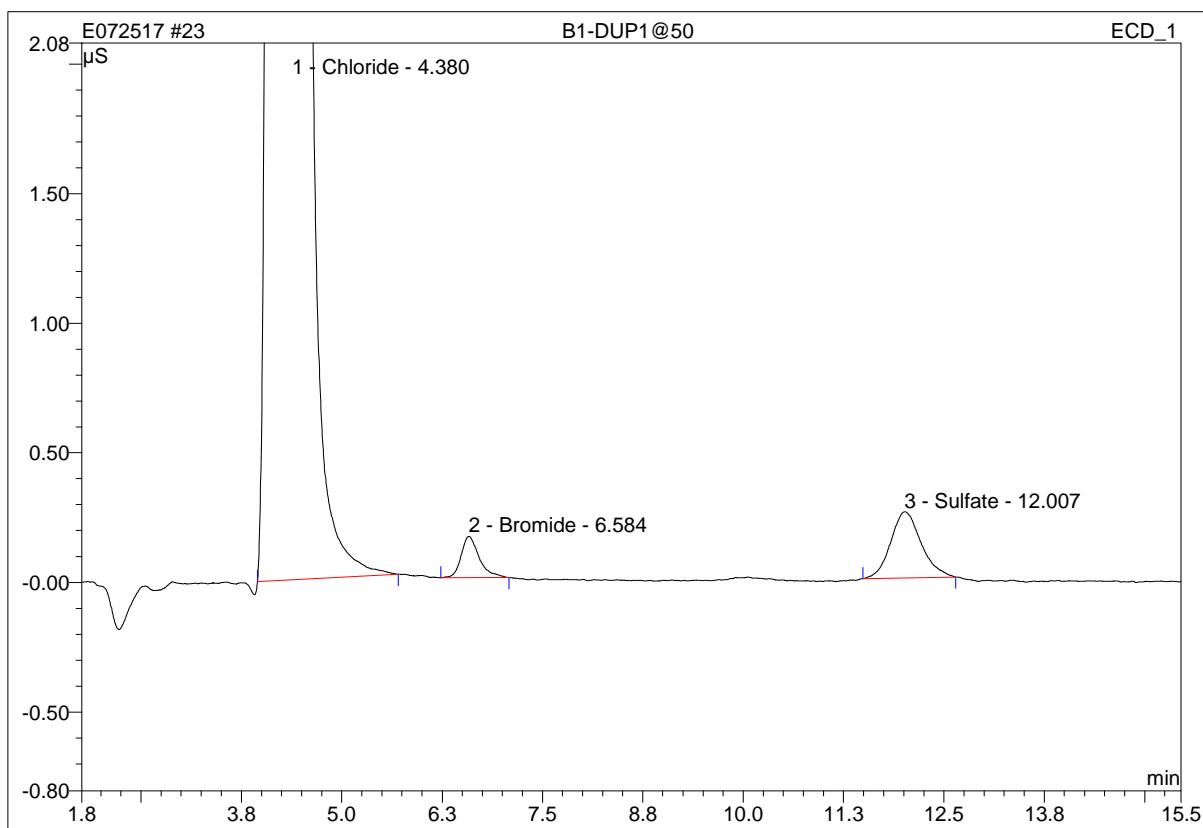
Environmental Testing Laboratory Since 1949



Raw Data - Duplicate

23 B1-DUP1@50

Sample Name: B1-DUP1@50 **Injection Volume:** 20.0
Vial Number: 20 **Channel:** IC5
Sample Type: unknown **Wavelength:** n.a.
Control Program: IC5 **Bandwidth:** n.a.
Quantif. Method: IC5 ANION **Dilution Factor:** 1.0000
Recording Time: 7/25/2017 18:16 **Sample Weight:** 1.0000
Run Time (min): 15.50 **Sample Amount:** 1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	4.38	Chloride	218.343	44.886	99.66	178.082	BMB
2	6.58	Bromide	0.159	0.042	0.09	0.605	BMB
3	12.01	Sulfate	0.255	0.112	0.25	0.957	BMB
Total:			218.757	45.040	100.00	179.644	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

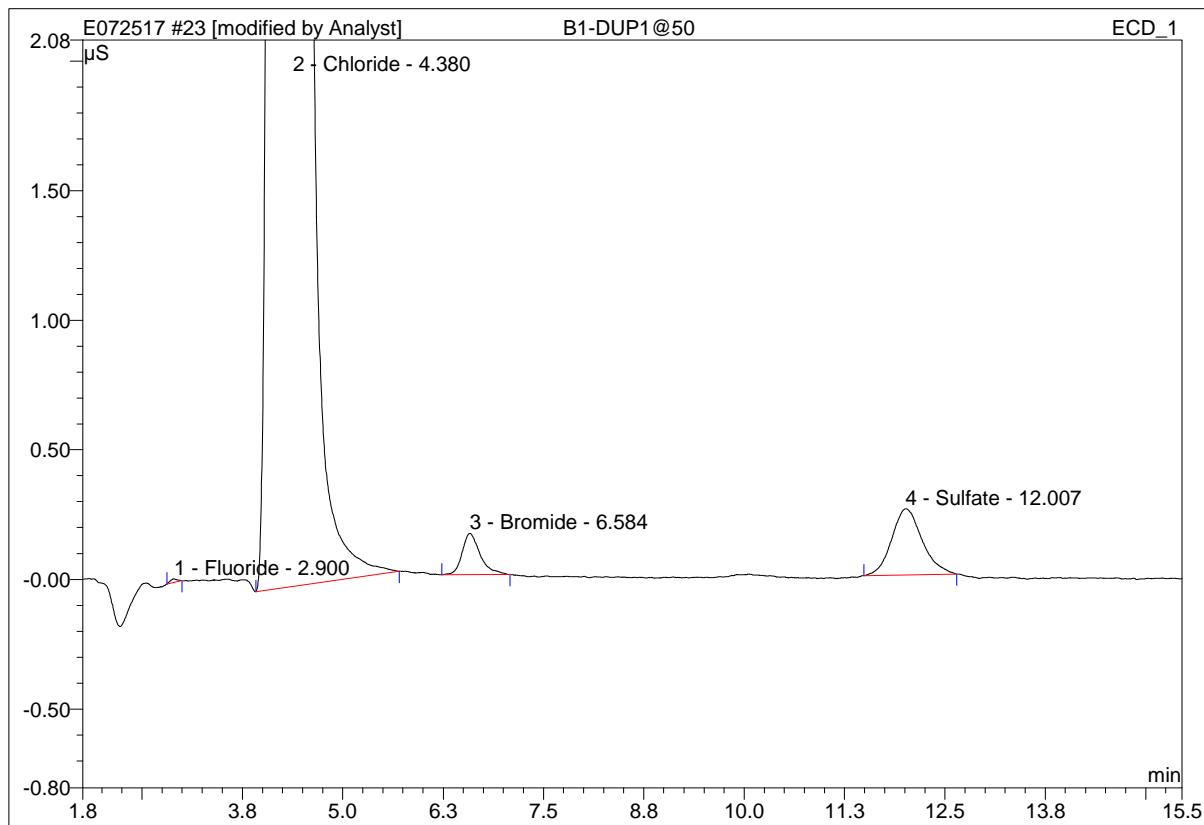
M = Main

R= Rider

BMB = This peak type is for resolved peaks.

23 B1-DUP1@50

Sample Name:	B1-DUP1@50	Injection Volume:	20.0
Vial Number:	20	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 18:16	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	2.90	Fluoride	0.013	0.001	0.00	0.004	BMB*
2	4.38	Chloride	218.380	44.930	99.66	178.230	BMB*
3	6.58	Bromide	0.159	0.042	0.09	0.605	BMB
4	12.01	Sulfate	0.255	0.112	0.25	0.957	BMB
Total:			218.808	45.085	100.00	179.796	

modified on: 07.25.17 21:03 By: OLH/EMW/JSW

* = Manual integrations due to peak, rider or baseline error.

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R= Rider

BMB = This peak type is for resolved peaks.



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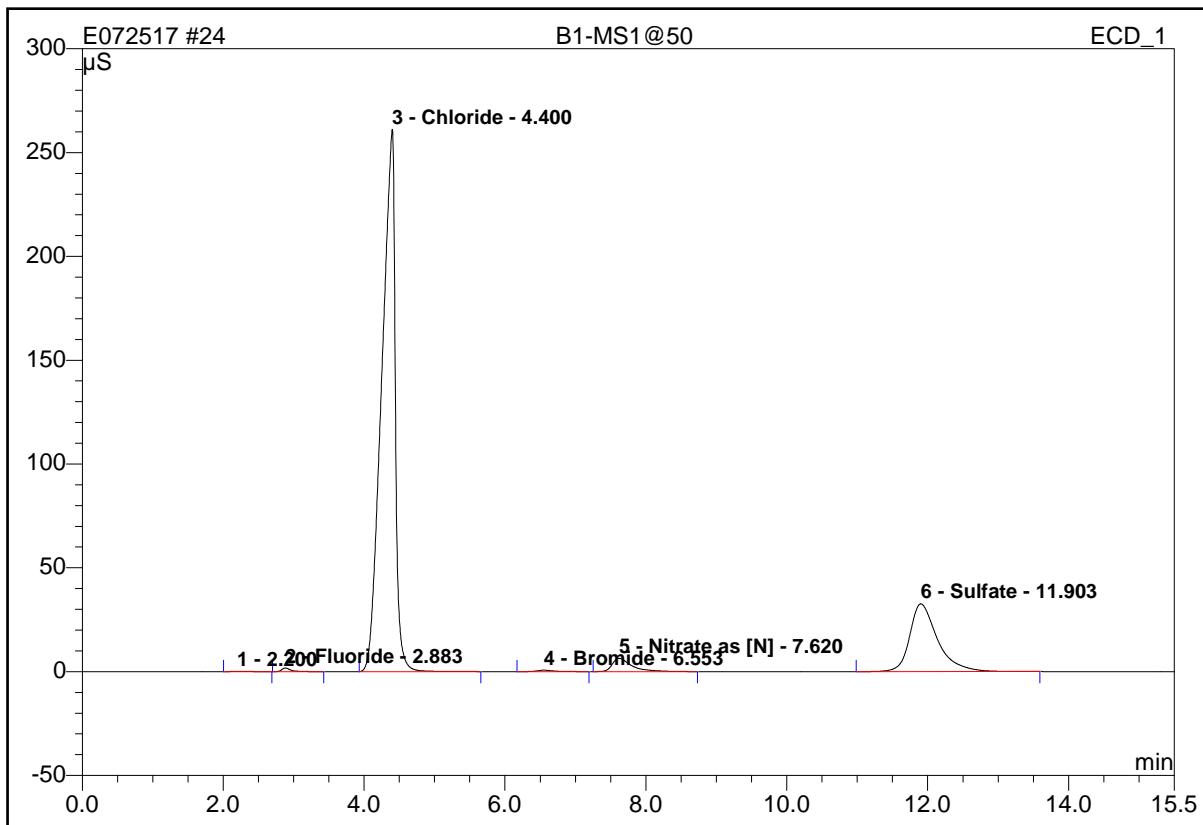
Environmental Testing Laboratory Since 1949



Raw Data - Matrix Spike

24 B1-MS1 @50

Sample Name:	B1-MS1 @50	<i>Injection Volume:</i>	20.0
Vial Number:	20	<i>Channel:</i>	IC5
Sample Type:	unknown	<i>Wavelength:</i>	n.a.
Control Program:	IC5	<i>Bandwidth:</i>	n.a.
Quantif. Method:	IC5 ANION	<i>Dilution Factor:</i>	1.0000
Recording Time:	7/25/2017 18:34	<i>Sample Weight:</i>	1.0000
Run Time (min):	15.50	<i>Sample Amount:</i>	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	2.20	n.a.	0.131	0.038	0.05	n.a.	BMB
2	2.88	Fluoride	1.765	0.259	0.34	1.017	BMB
3	4.40	Chloride	261.161	57.958	76.88	220.446	BMB
4	6.55	Bromide	0.681	0.180	0.24	2.586	BMB
5	7.62	Nitrate as [N]	6.373	2.046	2.71	4.978	BMB
6	11.90	Sulfate	32.604	14.902	19.77	99.788	BMB
Total:			302.715	75.384	100.00	328.815	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

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b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.



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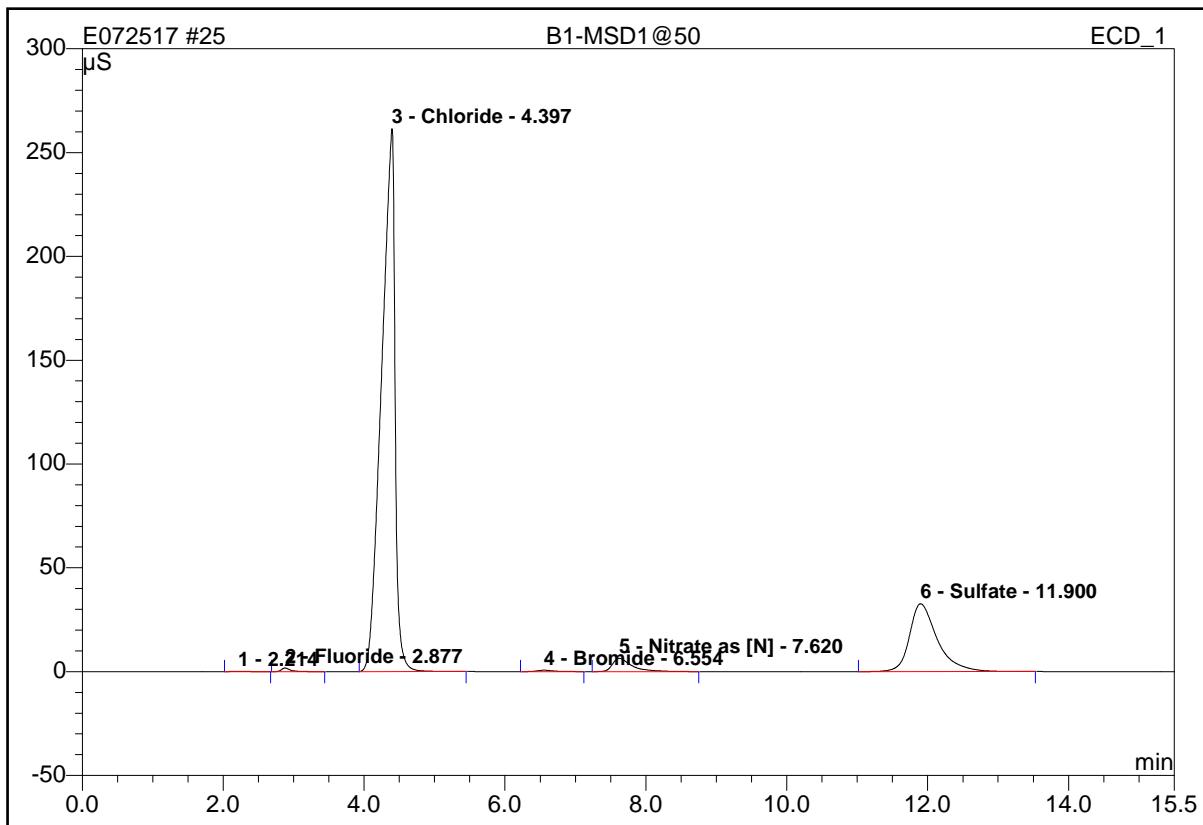
Environmental Testing Laboratory Since 1949



Raw Data - Matrix Spike Duplicate

25 B1-MSD1@50

Sample Name:	B1-MSD1@50	<i>Injection Volume:</i>	20.0
Vial Number:	20	<i>Channel:</i>	IC5
Sample Type:	unknown	<i>Wavelength:</i>	n.a.
Control Program:	IC5	<i>Bandwidth:</i>	n.a.
Quantif. Method:	IC5 ANION	<i>Dilution Factor:</i>	1.0000
Recording Time:	7/25/2017 18:52	<i>Sample Weight:</i>	1.0000
Run Time (min):	15.50	<i>Sample Amount:</i>	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount ppm	Type
1	2.21	n.a.	0.132	0.039	0.05	n.a.	BMB
2	2.88	Fluoride	1.770	0.260	0.34	1.020	BMB
3	4.40	Chloride	261.511	58.045	76.88	220.718	BMB
4	6.55	Bromide	0.676	0.178	0.24	2.554	BMB
5	7.62	Nitrate as [N]	6.379	2.054	2.72	4.996	BMB
6	11.90	Sulfate	32.670	14.929	19.77	99.956	BMB
Total:			303.138	75.505	100.00	329.244	

modified on: n.a.

By: OLH/EMW/JSW

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b = Baseline is below non resolved peaks drawn from peak end to peak end.
M = Main
R = Rider
BMB = This peak type is for resolved peaks.



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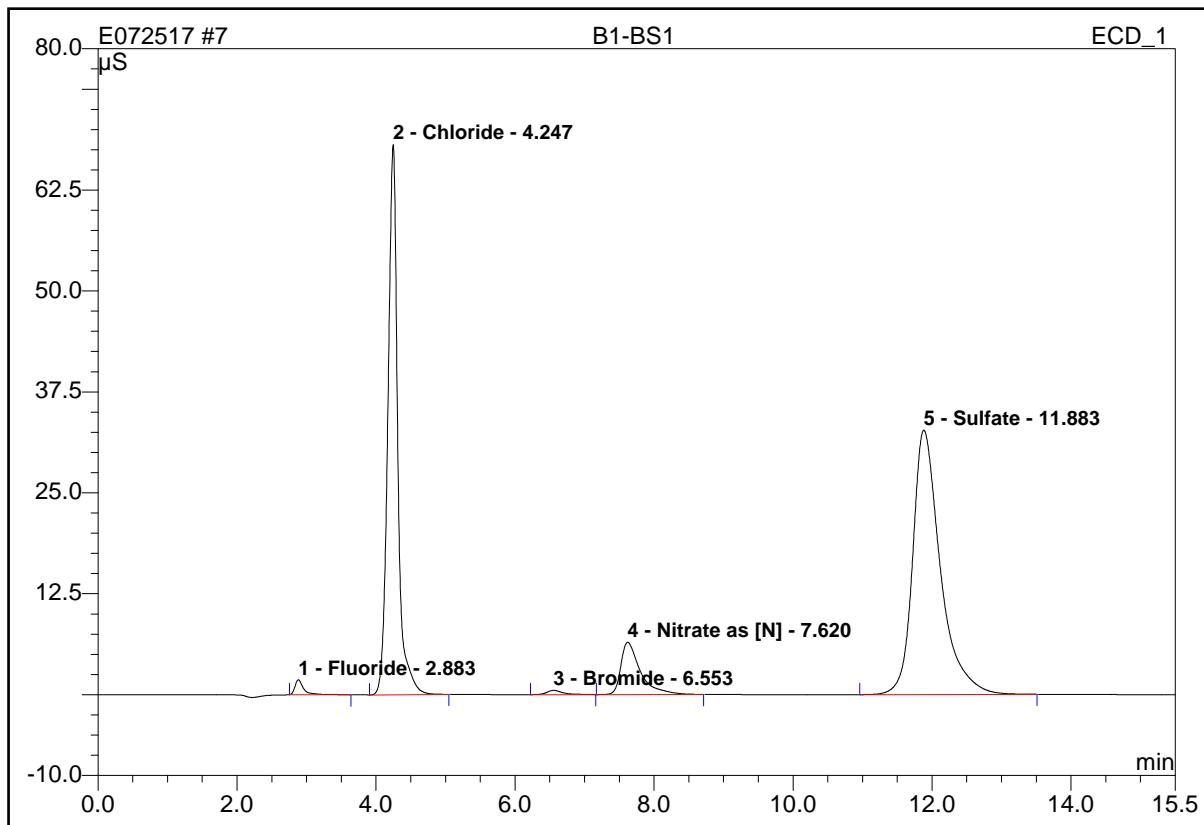
Environmental Testing Laboratory Since 1949



Raw Data - Lab Control Sample

7 B1-BS1

Sample Name:	B1-BS1	Injection Volume:	20.0
Vial Number:	18	Channel:	IC5
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC5	Bandwidth:	n.a.
Quantif. Method:	IC5 ANION	Dilution Factor:	1.0000
Recording Time:	7/25/2017 13:30	Sample Weight:	1.0000
Run Time (min):	15.50	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppm	Type
1	2.88	Fluoride	1.843	0.266	0.92	1.043	BMB
2	4.25	Chloride	68.128	11.189	38.83	51.021	BMB
3	6.55	Bromide	0.524	0.142	0.49	2.036	BMB
4	7.62	Nitrate as [N]	6.473	2.103	7.30	5.109	BMB
5	11.88	Sulfate	32.743	15.112	52.45	101.099	BMB
Total:			109.710	28.812	100.00	160.308	

modified on: n.a.

By: OLH/EMW/JSW

* = Manual integrations due to peak, rider, or baseline errors.

B = Baseline with direct contact on the left or right side of peak.

b = Baseline is below non resolved peaks drawn from peak end to peak end.

M = Main

R = Rider

BMB = This peak type is for resolved peaks.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Batch Information



PREPARATION BENCH SHEET

B|G2045

BC Laboratories

Printed: 8/24/2017 10:33:44AM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720228-01 I	i300.0w Chloride	7/25/2017 12:00PM	EMW	20	20					
1720228-01 I	i300.0w Fluoride	7/25/2017 12:00PM	EMW	20	20					
1720228-01 I	i300.0w Nitrate as NO3	7/25/2017 12:00PM	EMW	20	20					
1720228-01 I	i300.0w Sulfate	7/25/2017 12:00PM	EMW	20	20					
1720228-01 I	i300.0w Bromide	7/25/2017 12:00PM	EMW	20	20					
1720228-01RE1 I	i300.0w Fluoride	7/25/2017 12:00PM	EMW	20	20					
1720228-01RE1 I	i300.0w Nitrate as NO3	7/25/2017 12:00PM	EMW	20	20					
1720228-01RE1 I	i300.0w Chloride	7/25/2017 12:00PM	EMW	20	20					
1720228-01RE1 I	i300.0w Bromide	7/25/2017 12:00PM	EMW	20	20					
1720228-01RE1 I	i300.0w Sulfate	7/25/2017 12:00PM	EMW	20	20					
1720267-01 F	i300.0w Sulfate	7/25/2017 12:00PM	OLH	20	20					
1720267-01 F	i300.0w Chloride	7/25/2017 12:00PM	OLH	20	20					
1720267-01 F	i300.0w Nitrate as N	7/25/2017 12:00PM	OLH	20	20					
1720267-01RE1 F	i300.0w Nitrate as N	7/25/2017 12:00PM	OLH	20	20					
1720267-01RE1 F	i300.0w Sulfate	7/25/2017 12:00PM	OLH	20	20					
1720267-01RE1 F	i300.0w Nitrate as NO3	7/25/2017 12:00PM		20	20					
1720267-01RE1 F	i300.0w Fluoride	7/25/2017 12:00PM		20	20					
1720267-01RE1 F	i300.0w Bromide	7/25/2017 12:00PM		20	20					
1720267-01RE1 F	i300.0w Chloride	7/25/2017 12:00PM	OLH	20	20					
1720267-02 F	i300.0w Chloride	7/25/2017 12:00PM	OLH	20	20					
1720267-02 F	i300.0w Nitrate as N	7/25/2017 12:00PM	OLH	20	20					
1720267-02 F	i300.0w Sulfate	7/25/2017 12:00PM	OLH	20	20					
1720267-02RE1 F	i300.0w Chloride	7/25/2017 12:00PM	OLH	20	20					
1720267-02RE1 F	i300.0w Nitrate as N	7/25/2017 12:00PM	OLH	20	20					
1720267-02RE1 F	i300.0w Sulfate	7/25/2017 12:00PM	OLH	20	20					



PREPARATION BENCH SHEET

B[G2045]

BC Laboratories

Printed: 8/24/2017 10:33:44AM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720267-03 F	i300.0w Sulfate	7/25/2017 12:00PM	OLH	20	20					
1720267-03 F	i300.0w Chloride	7/25/2017 12:00PM	OLH	20	20					
1720267-03 F	i300.0w Nitrate as N	7/25/2017 12:00PM	OLH	20	20					
1720267-03RE1 F	i300.0w Chloride	7/25/2017 12:00PM	OLH	20	20					
1720267-03RE1 F	i300.0w Nitrate as N	7/25/2017 12:00PM	OLH	20	20					
1720267-03RE1 F	i300.0w Sulfate	7/25/2017 12:00PM	OLH	20	20					
1720267-03RE2 F	i300.0w Chloride	7/25/2017 12:00PM	OLH	20	20					
1720267-03RE2 F	i300.0w Nitrate as N	7/25/2017 12:00PM	OLH	20	20					
1720267-03RE2 F	i300.0w Sulfate	7/25/2017 12:00PM	OLH	20	20					
1720267-04 H	i300.0w Chloride	7/25/2017 12:00PM	OLH	20	20					
1720267-04 H	i300.0w Nitrate as N	7/25/2017 12:00PM	OLH	20	20					
1720267-04 H	i300.0w Sulfate	7/25/2017 12:00PM	OLH	20	20					
1720267-08 G	i300.0w Chloride	7/25/2017 12:00PM	OLH	20	20					
1720267-08 G	i300.0w Nitrate as N	7/25/2017 12:00PM	OLH	20	20					
1720267-08 G	i300.0w Sulfate	7/25/2017 12:00PM	OLH	20	20					
1720267-09 G	i300.0w Chloride	7/25/2017 12:00PM	OLH	20	20					
1720267-09 G	i300.0w Nitrate as N	7/25/2017 12:00PM	OLH	20	20					
1720267-09 G	i300.0w Sulfate	7/25/2017 12:00PM	OLH	20	20					
1720267-10 G	i300.0w Chloride	7/25/2017 12:00PM	OLH	20	20					
1720267-10 G	i300.0w Nitrate as N	7/25/2017 12:00PM	OLH	20	20					
1720267-10 G	i300.0w Sulfate	7/25/2017 12:00PM	OLH	20	20					
1720267-11 G	i300.0w Chloride	7/25/2017 12:00PM	OLH	20	20					
1720267-11 G	i300.0w Nitrate as N	7/25/2017 12:00PM	OLH	20	20					
1720267-11 G	i300.0w Sulfate	7/25/2017 12:00PM	OLH	20	20					
B[G2045-BLK1]	QC	7/25/2017 12:00PM	OLH	20	20					



PREPARATION BENCH SHEET

B[G2045]

BC Laboratories

Printed: 8/24/2017 10:33:44AM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
B[G2045-BS1]	QC	7/25/2017 12:00PM	OLH	20	20	7D25031		200		
B[G2045-DUP1]	QC	7/25/2017 12:00PM	OLH	20	20		1720267-01RE1			
B[G2045-MS1]	QC	7/25/2017 12:00PM	OLH	19.8	20	7D25031	1720267-01RE1	10000		
B[G2045-MSD1]	QC	7/25/2017 12:00PM	OLH	19.8	20	7D25031	1720267-01RE1	10000		

Spike Mixes	Description	Solvent	Prepared	Expires
7D25031	300.0 HSSS-SPIKE	DI WATER	4/25/2017 by Emily Wells	10/25/2017



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Sequence Information



ANALYSIS SEQUENCE

1713206

Instrument: IC5
Calibration ID: Sequence Date: 07/25/2017 Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713206-ICV1	QC		1		7G12051		
1713206-ICB1	QC		2				
B[G2045-BLK1]	QC		3				
B[G2045-BS1]	QC		4				
1720267-01	i300.0w Chloride	F	5				
1720267-01	i300.0w Nitrate as N	F	5				
1720267-01	i300.0w Sulfate	F	5				
1720267-02	i300.0w Chloride	F	6				
1720267-02	i300.0w Nitrate as N	F	6				
1720267-02	i300.0w Sulfate	F	6				
1720267-03	i300.0w Chloride	F	7				
1720267-03	i300.0w Nitrate as N	F	7				
1720267-03	i300.0w Sulfate	F	7				
1720267-04	i300.0w Chloride	H	8				
1720267-04	i300.0w Nitrate as N	H	8				
1720267-04	i300.0w Sulfate	H	8				
1720267-08	i300.0w Chloride	G	9				
1720267-08	i300.0w Nitrate as N	G	9				
1720267-08	i300.0w Sulfate	G	9				
1713206-CCV1	QC		10		7G12050		
1713206-CCB1	QC		11				
1720267-09	i300.0w Chloride	G	12				
1720267-09	i300.0w Nitrate as N	G	12				
1720267-09	i300.0w Sulfate	G	12				
1720267-10	i300.0w Chloride	G	13				
1720267-10	i300.0w Nitrate as N	G	13				
1720267-10	i300.0w Sulfate	G	13				
1720267-11	i300.0w Chloride	G	14				
1720267-11	i300.0w Nitrate as N	G	14				
1720267-11	i300.0w Sulfate	G	14				
1720267-01RE1	i300.0w Bromide	F	15			BatchQC	
1720267-01RE1	i300.0w Chloride	F	15			Added 7/26/2017 by JSW	
1720267-01RE1	i300.0w Fluoride	F	15			BatchQC	
1720267-01RE1	i300.0w Nitrate as N	F	15			Added 7/26/2017 by JSW	
1720267-01RE1	i300.0w Nitrate as NO3	F	15			BatchQC	
1720267-01RE1	i300.0w Sulfate	F	15			Added 7/26/2017 by JSW	
B[G2045-DUP1]	QC		16				
B[G2045-MS1]	QC		17				
B[G2045-MSD1]	QC		18				



ANALYSIS SEQUENCE

1713206

Instrument: IC5

Calibration ID:

Sequence Date: 07/25/2017

Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720267-02RE1	i300.0w Chloride	F	19				Added 7/26/2017 by JSW
1720267-02RE1	i300.0w Nitrate as N	F	19				Added 7/26/2017 by JSW
1720267-02RE1	i300.0w Sulfate	F	19				Added 7/26/2017 by JSW
1720267-03RE1	i300.0w Chloride	F	20				Added 7/26/2017 by JSW
1720267-03RE1	i300.0w Nitrate as N	F	20				Added 7/26/2017 by JSW
1720267-03RE1	i300.0w Sulfate	F	20				Added 7/26/2017 by JSW
1713206-CCV2	QC		21		7G12050		
1713206-CCB2	QC		22				
1720267-03RE2	i300.0w Chloride	F	23				Added 7/26/2017 by JSW
1720267-03RE2	i300.0w Nitrate as N	F	23				Added 7/26/2017 by JSW
1720267-03RE2	i300.0w Sulfate	F	23				Added 7/26/2017 by JSW
1720228-01	i300.0w Bromide	I	24				
1720228-01	i300.0w Chloride	I	24				
1720228-01	i300.0w Fluoride	I	24				
1720228-01	i300.0w Nitrate as NO3	I	24				
1720228-01	i300.0w Sulfate	I	24				
1720228-01RE1	i300.0w Bromide	I	25				Added 7/26/2017 by JSW
1720228-01RE1	i300.0w Chloride	I	25				Added 7/26/2017 by JSW
1720228-01RE1	i300.0w Fluoride	I	25				Added 7/26/2017 by JSW
1720228-01RE1	i300.0w Nitrate as NO3	I	25				Added 7/26/2017 by JSW
1720228-01RE1	i300.0w Sulfate	I	25				Added 7/26/2017 by JSW
1713206-CCV3	QC		26		7G12050		
1713206-CCB3	QC		27				



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG: 17-20267

Class: WET

Method: EPA-310.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSES DATA PACKAGE COVER PAGE**EPA-310.1**

Laboratory: BC Laboratories

SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Client Sample Id:
26PZ01_170724
26PZ02_170724
26PZ03_170724
27EW-01_170724
27MW06_170724
27MW07_170724
27MW08_170724
27MW09_170724

Lab Sample Id:
1720267-01
1720267-02
1720267-03
1720267-04
1720267-08
1720267-09
1720267-10
1720267-11

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature:

Name: Sara Guron

Date:

08-24-2017

Title:

QA/QC Manager



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS**EPA-310.1****Laboratory:** BC Laboratories**SDG:** 17-20267**Client:** AMEC Environmental & Infrastructure- \$AMCN**Project:** Alameda**Matrix:** Water**Instrument:** MET-1

Analyte	DL	LOD	LOQ	Units
Total Alkalinity as CaCO ₃	4.1	4.1	4.1	mg/L



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**INORGANIC ANALYSIS DATA SHEET
EPA-310.1****26PZ01_170724**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-01 File ID: Tiamo072717-182
Sampled: 07/24/17 11:16 Prepared: 07/27/17 15:00 Analyzed: 07/27/17 22:24
Solids: 0.00 Preparation: No Prep Initial/Final: 50 ml / 50 ml
Batch: B[G2114 Sequence: 1713352 Calibration: UNASSIGNED Instrument: MET-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Total Alkalinity as CaCO ₃	2000	8.2	8.2	8.2	2	D	EPA-310.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**INORGANIC ANALYSIS DATA SHEET
EPA-310.1****26PZ02_170724**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-02 File ID: Tiamo072717-012
Sampled: 07/24/17 10:23 Prepared: 07/27/17 08:30 Analyzed: 07/27/17 09:37
Solids: 0.00 Preparation: No Prep Initial/Final: 50 ml / 50 ml
Batch: B[G2107 Sequence: 1713352 Calibration: UNASSIGNED Instrument: MET-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Total Alkalinity as CaCO ₃	1600	8.2	8.2	8.2	2	D	EPA-310.1



AMEC Environmental & Infrastructure-
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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**INORGANIC ANALYSIS DATA SHEET
EPA-310.1****26PZ03_170724**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-03 File ID: Tiamo072717-014
Sampled: 07/24/17 12:05 Prepared: 07/27/17 08:30 Analyzed: 07/27/17 09:46
Solids: 0.00 Preparation: No Prep Initial/Final: 50 ml / 50 ml
Batch: B[G2107 Sequence: 1713352 Calibration: UNASSIGNED Instrument: MET-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Total Alkalinity as CaCO ₃	1800	8.2	8.2	8.2	2	D	EPA-310.1



AMEC Environmental & Infrastructure-
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Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**INORGANIC ANALYSIS DATA SHEET
EPA-310.1**

27EW-01_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-04 File ID: Tiamo072717-016
Sampled: 07/24/17 13:45 Prepared: 07/27/17 08:30 Analyzed: 07/27/17 09:56
Solids: 0.00 Preparation: No Prep Initial/Final: 50 ml / 50 ml
Batch: B[G2107 Sequence: 1713352 Calibration: UNASSIGNED Instrument: MET-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Total Alkalinity as CaCO ₃	540	8.2	8.2	8.2	2	D	EPA-310.1



AMEC Environmental & Infrastructure-
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Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-310.1

27MW06_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-08 File ID: Tiamo072717-009
Sampled: 07/24/17 09:00 Prepared: 07/27/17 08:30 Analyzed: 07/27/17 09:24
Solids: 0.00 Preparation: No Prep Initial/Final: 50 ml / 50 ml
Batch: B[G2107 Sequence: 1713352 Calibration: UNASSIGNED Instrument: MET-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Total Alkalinity as CaCO ₃	54	4.1	4.1	4.1	1		EPA-310.1



AMEC Environmental & Infrastructure-
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Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-310.1

27MW07_170724

Laboratory: BC Laboratories

SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720267-09

File ID: Tiamo072717-018

Sampled: 07/24/17 10:30

Prepared: 07/27/17 08:30

Analyzed: 07/27/17 10:05

Solids: 0.00

Preparation: No Prep

Initial/Final: 50 ml / 50 ml

Batch: B[G2107

Sequence: 1713352

Calibration: UNASSIGNED

Instrument: MET-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Total Alkalinity as CaCO ₃	150	4.1	4.1	4.1	1		EPA-310.1



AMEC Environmental & Infrastructure-
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Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-310.1

27MW08_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-10 File ID: Tiamo072717-020
Sampled: 07/24/17 08:20 Prepared: 07/27/17 08:30 Analyzed: 07/27/17 10:12
Solids: 0.00 Preparation: No Prep Initial/Final: 50 ml / 50 ml
Batch: B[G2107 Sequence: 1713352 Calibration: UNASSIGNED Instrument: MET-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Total Alkalinity as CaCO ₃	180	4.1	4.1	4.1	1		EPA-310.1



AMEC Environmental & Infrastructure-
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Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**INORGANIC ANALYSIS DATA SHEET
EPA-310.1****27MW09_170724**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-11 File ID: Tiamo072717-022
Sampled: 07/24/17 12:55 Prepared: 07/27/17 08:30 Analyzed: 07/27/17 10:19
Solids: 0.00 Preparation: No Prep Initial/Final: 50 ml / 50 ml
Batch: B[G2107 Sequence: 1713352 Calibration: UNASSIGNED Instrument: MET-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Total Alkalinity as CaCO ₃	300	8.2	8.2	8.2	2	D	EPA-310.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
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Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

PREPARATION BATCH SUMMARY**EPA-310.1**

Laboratory: BC Laboratories SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Batch: B[G2107 Batch Matrix: Water Preparation: No Prep

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
26PZ02_170724	1720267-02	Tiamo072717-012	07/27/17 08:30	
26PZ03_170724	1720267-03	Tiamo072717-014	07/27/17 08:30	
27EW-01_170724	1720267-04	Tiamo072717-016	07/27/17 08:30	
27MW06_170724	1720267-08	Tiamo072717-009	07/27/17 08:30	
27MW07_170724	1720267-09	Tiamo072717-018	07/27/17 08:30	
27MW08_170724	1720267-10	Tiamo072717-020	07/27/17 08:30	
27MW09_170724	1720267-11	Tiamo072717-022	07/27/17 08:30	
Blank	B[G2107-BLK1	Tiamo072717-007	07/27/17 08:30	
LCS	B[G2107-BS3	Tiamo072717-187	07/27/17 08:30	
27MW06_170724	B[G2107-DUP1	Tiamo072717-010	07/27/17 08:30	



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Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

PREPARATION BATCH SUMMARY**EPA-310.1**

Laboratory: BC Laboratories SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Batch: B[G2114 Batch Matrix: Water Preparation: No Prep

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
26PZ01_170724	1720267-01	Tiamo072717-182	07/27/17 15:00	
Blank	B[G2114-BLK1	Tiamo072717-165	07/27/17 15:00	
LCS	B[G2114-BS3	Tiamo072717-164	07/27/17 15:00	
Duplicate	B[G2114-DUP1	Tiamo072717-167	07/27/17 15:00	



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Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

**METHOD BLANK DATA SHEET
EPA-310.1**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: B[G2107-BLK1 File ID: Tiamo072717-007
Prepared: 07/27/17 08:30 Preparation: No Prep Initial/Final: 50 ml / 50 ml
Analyzed: 07/27/17 09:14 Instrument: MET-1
Batch: B[G2107 Sequence: 1713352 Calibration: UNASSIGNED

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
---	Total Alkalinity as CaCO3	4.1	4.1	4.1	4.1	U



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Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

**METHOD BLANK DATA SHEET
EPA-310.1**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: B[G2114-BLK1 File ID: Tiamo072717-165
Prepared: 07/27/17 15:00 Preparation: No Prep Initial/Final: 50 ml / 50 ml
Analyzed: 07/27/17 21:10 Instrument: MET-1
Batch: B[G2114 Sequence: 1713352 Calibration: UNASSIGNED

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
---	Total Alkalinity as CaCO3	4.1	4.1	4.1	4.1	U



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9210 Sky Park Court #200
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Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

DUPLICATES

EPA-310.1

27MW06 170724

Laboratory: BC Laboratories

SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Matrix: Water

Laboratory ID: B[G2107-DUP1

Batch: B[G2107

Lab Source ID: 1720267-08

Preparation: No Prep

Initial/Final: 50 ml / 50 ml

Source Sample Name: 27MW06_170724

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/L)	C	DUPLICATE CONCENTRATION (mg/L)	C	RPD %	Q	METHOD
Total Alkalinity as CaCO3	10	54.010		48.990		9.75		EPA-310.1

* Values outside of QC limits



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Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

DUPLICATES

EPA-310.1

[Duplicate](#)Laboratory: BC LaboratoriesSDG: 17-20267Client: AMEC Environmental & Infrastructure- \$AMCNProject: AlamedaMatrix: WaterLaboratory ID: B[G2114-DUP1Batch: B[G2114Lab Source ID: 1720210-01Preparation: No PrepInitial/Final: 50 ml / 50 mlSource Sample Name: Duplicate

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/L)	C	DUPLICATE CONCENTRATION (mg/L)	C	RPD %	Q	METHOD
Total Alkalinity as CaCO3	10	116.53		114.10		2.11		EPA-310.1

* Values outside of QC limits



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Project Number: 5023146096
Project Manager: Kevin Olness

LCS RECOVERY**EPA-310.1**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water
Batch: B[G2107 Laboratory ID: B[G2107-BS3
Preparation: No Prep Initial/Final: 50 ml / 50 ml

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC. #	QC LIMITS REC.
Total Alkalinity as CaCO3	100.00	91.280	91.3	90 - 110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
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LCS RECOVERY**EPA-310.1**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water
Batch: B[G2114 Laboratory ID: B[G2114-BS3
Preparation: No Prep Initial/Final: 50 ml / 50 ml

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC. #	QC LIMITS REC.
Total Alkalinity as CaCO3	100.00	93.870	93.9	90 - 110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY EPA-310.1

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1713352 Instrument: MET-1
Matrix: Water Calibration: UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Blank	B[G2107-BLK1	Tiamo072717-007	07/27/17 09:14
27MW06_170724	1720267-08	Tiamo072717-009	07/27/17 09:24
27MW06_170724	B[G2107-DUP1	Tiamo072717-010	07/27/17 09:29
26PZ02_170724	1720267-02	Tiamo072717-012	07/27/17 09:37
26PZ03_170724	1720267-03	Tiamo072717-014	07/27/17 09:46
27EW-01_170724	1720267-04	Tiamo072717-016	07/27/17 09:56
27MW07_170724	1720267-09	Tiamo072717-018	07/27/17 10:05
27MW08_170724	1720267-10	Tiamo072717-020	07/27/17 10:12
27MW09_170724	1720267-11	Tiamo072717-022	07/27/17 10:19
LCS	B[G2114-BS3	Tiamo072717-164	07/27/17 21:05
Blank	B[G2114-BLK1	Tiamo072717-165	07/27/17 21:10
Duplicate	B[G2114-DUP1	Tiamo072717-167	07/27/17 21:21
26PZ01_170724	1720267-01	Tiamo072717-182	07/27/17 22:24
LCS	B[G2107-BS3	Tiamo072717-187	07/27/17 22:45



AMEC Environmental & Infrastructure-
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Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

HOLDING TIME SUMMARY**EPA-310.1**Laboratory: BC Laboratories SDG: 17-20267Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
26PZ01_170724	07/24/17 11:16	07/24/17 21:40	07/27/17 15:00	3.00	14.00	07/27/17 22:24	3.00	14.00	
26PZ02_170724	07/24/17 10:23	07/24/17 21:40	07/27/17 08:30	3.00	14.00	07/27/17 09:37	3.00	14.00	
26PZ03_170724	07/24/17 12:05	07/24/17 21:40	07/27/17 08:30	3.00	14.00	07/27/17 09:46	3.00	14.00	
27EW-01_170724	07/24/17 13:45	07/24/17 21:40	07/27/17 08:30	3.00	14.00	07/27/17 09:56	3.00	14.00	
27MW06_170724	07/24/17 09:00	07/24/17 21:40	07/27/17 08:30	3.00	14.00	07/27/17 09:24	3.00	14.00	
27MW07_170724	07/24/17 10:30	07/24/17 21:40	07/27/17 08:30	3.00	14.00	07/27/17 10:05	3.00	14.00	
27MW08_170724	07/24/17 08:20	07/24/17 21:40	07/27/17 08:30	3.00	14.00	07/27/17 10:12	3.00	14.00	
27MW09_170724	07/24/17 12:55	07/24/17 21:40	07/27/17 08:30	3.00	14.00	07/27/17 10:19	3.00	14.00	

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data From Instrument MET-1



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Analytical Runs



2017-08-01 12:13:54 Page 1 of 22

Page 1 of 22

Allah's infinite grace and mercy

Sample ID	Sample Vol, ml	Cond, µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
EC Calibration	Determination start	2017-07-27 08:42:59 (24.5 °C)							Method . BCL-CAL Cond
ICV1@COND	Determination start	2017-07-27 08:46:54 (24.5 °C)							Method . BCL-Cond
B1-BS1@COND	Determination start	2017-07-27 08:48:32 (24.5 °C)							Method . BCL-Cond
B1-BS2@pH	Determination start	2017-07-27 08:50:05 308.00							Method . BCL-Cond
pH Calibration									
B1-BS3@Alk	Determination start	2017-07-27 09:06:02 (25.5 °C)				Titer	0.076		Method . BCL-pH
B1-BLK1@Alk	Determination start	2017-07-27 09:09:12 (24.8 °C)				Titer	0.076		Method . BCL-Cond-pH-Alk
1720267-08@G	Determination start	2017-07-27 09:19:34 (23.8 °C)				Titer	0.076		Method . BCL-Cond-pH-Alk
1720267-08@Q	Determination start	2017-07-27 09:24:17 (23.9 °C)				Titer	0.076		Method . BCL-Cond-pH-Alk



2017-08-01 12:13:54 Page 2 of 22

Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol, ml	Cond, $\mu\text{mhos/cm}$	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start									
B1-DUP1	50	(23.9 °C) 138.30	(25.2 °C) 7.56	0.000	0.644	0.00	0.00	0.00	48.99
Determination start									
BLK1		2017-07-27 09:35:24 (25.0 °C) 9.70							
Determination start									
1720267-02@D	25	(23.9 °C) 16803.10	(25.4 °C) 7.29	0.000	10.246	0.00	0.00	0.00	1558.75
Determination start									
BLK1		2017-07-27 09:44:47 (25.0 °C) 203.70							
Determination start									
1720267-03@E	25	(23.9 °C) 24844.20	(25.5 °C) 7.06	0.000	11.638	0.00	0.00	0.00	1770.52
Determination start									
BLK1		2017-07-27 09:54:53 (24.9 °C) 183.00							
Determination start									
1720267-04@E	25	(23.8 °C) 3061.20	(25.5 °C) 7.57	0.000	3.576	0.00	0.00	0.00	544.03
Determination start									
BLK1		2017-07-27 10:03:29 (24.8 °C) 30.70							
Determination start									
1720267-09@E	50	(23.7 °C) 546.30	(25.2 °C) 7.50	0.000	2.036	0.00	0.00	0.00	154.87
Determination start									



Sample ID	Sample Vol, ml	Cond, $\mu\text{mhos/cm}$	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk	Alkalinity as CaCO_3 , mg/l
BLK1	Determination start	2017-07-27 10:12:39 (24.7 °C)			Titer	0.076			Method . BCL-Cond	
1720267-10@E	50	622.40	(23.7 °C) 7.79	0.000	2.376	0.00	0.00	0.00	180.73	180.73
BLK1	Determination start	2017-07-27 10:18:14 (24.7 °C)			Titer	0.076			Method . BCL-Cond	
1720267-11@E	25	11657.70	(23.6 °C) 7.60	0.000	1.944	0.00	0.00	0.00	295.75	295.75
BLK1	Determination start	2017-07-27 10:25:55 (24.7 °C)			Titer	0.076			Method . BCL-Cond	
1720269-01@D	25	1974.70	(23.5 °C) 9.19	0.218	0.998	0.00	66.33	85.50	151.83	
BLK1	Determination start	2017-07-27 10:34:01 (24.7 °C)			Titer	0.076			Method . BCL-Cond	
1720277-01@G	50	295.00	(23.5 °C) 8.92	0.118	0.992	0.00	17.95	57.51	75.46	
1720312-01@A	25	1317.20	(23.6 °C) 3.16	0.000	0.000	0.00	0.00	0.00	0.00	0.00



Sample ID	Sample Vol, ml	Cond, $\mu\text{mhos/cm}$	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
<hr/>									
BLK1	Determination start 2017-07-27 10:46:06 (24.6 °C) 27.10								Method . BCL-Cond
B2-BS1@COND	Determination start 2017-07-27 10:47:44 (23.6 °C) 309.80								Method . BCL-Cond
<hr/>									
B2-BS2@PH	Determination start 2017-07-27 10:49:33 (25.5 °C) 7.01								Method . BCL-pH
B2-BL3@ALK	Determination start 2017-07-27 10:52:46 (23.7 °C) 212.00	(25.3 °C)	10.08	0.448	1.202	0.00	68.16	23.28	91.43
BLK1	Determination start 2017-07-27 10:58:17 (23.9 °C) 3.20	(25.3 °C)	4.47	0.000	0.000	0.00	0.00	0.00	0.00
1720318-01@D	Determination start 2017-07-27 11:03:09 (23.7 °C) 2706.10	(25.5 °C)	7.88	0.000	1.492	0.00	0.00	226.98	226.98
B2-DUP1	Determination start 2017-07-27 11:09:02 (23.7 °C) 2710.00	(25.6 °C)	7.86	0.000	1.462	0.00	0.00	222.42	222.42
1720312-02@A	Determination start 2017-07-27 11:14:39 (23.9 °C) 974.50	(25.4 °C)	6.81	0.000	0.722	0.00	0.00	54.92	54.92
BLK1	Determination start 2017-07-27 11:20:35 (24.8 °C) 28.00							Method . BCL-Cond	



Sample ID	Sample Vol, ml	Cond, $\mu\text{mhos/cm}$	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-27 11:22:18									
1720318-01@E	25	(24.0 °C) 1650.10	(25.7 °C) 7.15	0.000	6.346	0.00	0.00	965.43	965.43
Determination start 2017-07-27 11:28:59									
1720318-02@D	25	(23.9 °C) 1193.90	(25.7 °C) 8.06	0.000	1.294	0.00	0.00	196.86	196.86
Determination start 2017-07-27 11:34:24									
1720318-03@D	25	(24.1 °C) 2821.80	(25.8 °C) 7.92	0.000	1.474	0.00	0.00	224.24	224.24
Determination start 2017-07-27 11:40:18									
1720318-04@D	25	(24.2 °C) 2531.30	(25.9 °C) 7.93	0.000	1.448	0.00	0.00	220.29	220.29
Determination start 2017-07-27 11:45:54									
17203337-01@A	50	(23.9 °C) 384.90	(25.6 °C) 8.09	0.000	1.390	0.00	0.00	105.73	105.73
Determination start 2017-07-27 11:51:48									
B1-BS3 @ ALK	50	(25.6 °C) 204.80	(26.4 °C) 10.19	0.418	1.004	0.00	63.59	12.78	76.37
Determination start 2017-07-27 11:57:22									
1720312-02@ARE1	50	(24.3 °C) 942.90	(25.8 °C) 6.59	0.000	0.680	0.00	0.00	51.73	51.73
Determination start 2017-07-27 12:03:33									
BLK1		(25.0 °C) 31.50							
Determination start 2017-07-27 12:05:34									
1720337-02@G	50	(23.7 °C) 388.00	(25.4 °C) 8.08	0.000	1.752	0.00	0.00	133.27	133.27



Sample ID	Sample Vol, ml	Cond, µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
<hr/>									
1720342-02@A	25	(23.8 °C) 1141.70	2017-07-27 12:11:35 (25.7 °C)	0.000	0.468	0.00	0.00	0.00	Method . BCL-Cond-pH-Alk
BLK1		(27.6 °C) 9.30	2017-07-27 12:16:52						71.20
<hr/>									
B1-BS3@ALK	50	(25.2 °C) 211.20	2017-07-27 12:18:34 (26.1 °C)	0.420	0.966	0.00	63.90	9.58	73.48
1720343-01@D	50	(24.3 °C) 337.90	2017-07-27 12:30:36 (25.9 °C)	0.000	0.792	0.00	0.00	0.00	Method . BCL-Cond-pH-Alk
BLK1		(24.3 °C) 10.21	2017-07-27 12:37:24						60.24
B1-BS3@ALK	50	(24.9 °C) 209.30	2017-07-27 12:37:24 (26.1 °C)	0.506	1.170	0.00	76.98	12.02	89.00
B3-BS1@COND		(24.3 °C) 311.10	2017-07-27 12:42:46						Method . BCL-Cond
B3-BS2@PH		(26.0 °C) 7.01	2017-07-27 12:44:20						Method . BCL-pH
B3-BS3@ALK	50	(24.3 °C) 199.20	2017-07-27 12:47:44 (25.8 °C)	0.376	1.230	0.00	57.20	36.36	93.56
B3-BLK1	50	(24.5 °C) 2.00	2017-07-27 12:53:11 (25.9 °C)	0.000	0.012	0.00	0.00	0.91	0.91



Sample ID	Sample Vol, ml	Cond, $\mu\text{mhos/cm}$	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk	Alkalinity as CaCO_3 , mg/l
1720350-01@A	25	1314.80 (24.5 °C)	7.96 (26.2 °C)	0.000	1.406	0.00	0.00	0.00	Method . BCL-Cond-pH-Alk	213.90
B3-DUP1	25	1316.60 (24.5 °C)	7.98 (26.3 °C)	0.000	1.384	0.00	0.00	0.00	Method . BCL-Cond-pH-Alk	210.55
1720344-01@A	25	1033.20 (24.5 °C)	7.50 (26.3 °C)	0.000	1.986	0.00	0.00	0.00	Method . BCL-Cond-pH-Alk	302.14
BLK1		Determination start 2017-07-27 13:08:41 (25.7 °C)							Method . BCL-Cond	
1720344-02@A	50	747.70 (24.6 °C)	7.86 (26.2 °C)	0.000	1.556	0.00	0.00	0.00	Method . BCL-Cond-pH-Alk	118.36
BLK1		Determination start 2017-07-27 13:21:47 (25.7 °C)							Method . BCL-Cond	
1720345-01@A	25	1395.20 (24.1 °C)	7.90 (26.3 °C)	0.000	2.878	0.00	0.00	0.00	Method . BCL-Cond-pH-Alk	437.84
1720350-02@A	25	1381.10 (24.5 °C)	8.04 (26.6 °C)	0.000	1.638	0.00	0.00	0.00	Method . BCL-Cond-pH-Alk	249.19
1720350-03@A	50	747.90 (24.5 °C)	8.24 (26.6 °C)	0.000	3.572	0.00	0.00	0.00	Method . BCL-Cond-pH-Alk	271.71
										271.71



Sample ID	Sample Vol, ml	Cond, µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-27 13:40:40 (24.4 °C) (26.6 °C)									
1720350-04@A	50	858.20	8.16	0.000	1.856	0.00	0.00	0.00	141.18
Determination start 2017-07-27 13:46:10 (24.3 °C) (26.9 °C)									
1720350-05@A	25	1146.10	7.94	0.000	0.810	0.00	0.00	0.00	123.23
Determination start 2017-07-27 13:51:28 (24.7 °C) (26.8 °C)									
1720350-06@A	50	747.80	8.14	0.000	2.228	0.00	0.00	0.00	169.48
Determination start 2017-07-27 13:57:03 (25.0 °C) (26.9 °C)									
1720350-07@A	50	426.20	8.16	0.000	1.324	0.00	0.00	0.00	100.71
Determination start 2017-07-27 14:03:01 (25.4 °C) B4-BS1@COND 315.30									
Determination start 2017-07-27 14:04:43 (27.3 °C) B4-BS2@PH 7.01									
Determination start 2017-07-27 14:08:06 (26.0 °C) (27.5 °C)									
B4-BS3@ALK	50	216.60	10.17	0.480	1.204	0.00	0.00	73.02	18.56
Determination start 2017-07-27 14:13:34 (25.9 °C) (27.5 °C)									
B4-BLK1	50	1.40	4.66	0.000	0.012	0.00	0.00	0.00	0.91
Determination start 2017-07-27 14:18:36 (25.1 °C) (27.1 °C)									
1720350-08@A	50	970.10	7.88	0.000	1.982	0.00	0.00	0.00	150.76



Sample ID	Sample Vol, ml	Cond, $\mu\text{mhos/cm}$	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk	Alkalinity as CaCO_3 , mg/l
B4-DUP1	50	970.60 (25.1 °C)	2017-07-27 14:24:02 (27.0 °C)	0.000	1.962	0.00	0.00	0.00	Method . BCL-Cond-pH-Alk	149.24
1720350-09@A	50	471.10 (25.1 °C)	2017-07-27 14:29:30 (27.0 °C)	0.000	1.950	0.00	0.00	0.00	Method . BCL-Cond-pH-Alk	148.33
BLK1			Determination start 2017-07-27 14:34:56 (25.3 °C)						Method . BCL-Cond	148.33
1720337-01@ARE1	50	376.10 (24.5 °C)	2017-07-27 14:36:37 (26.6 °C)	0.000	1.720	0.00	0.00	0.00	Method . BCL-Cond-pH-Alk	130.83
1720351-01@D	25	5898.20 (24.7 °C)	2017-07-27 14:42:03 (27.0 °C)	0.000	4.024	0.00	0.00	0.00	Method . BCL-Cond-pH-Alk	612.18
BLK1			Determination start 2017-07-27 14:48:22 (25.3 °C)						Method . BCL-Cond	612.18
1720351-02@D	25	1289.20 (24.7 °C)	2017-07-27 14:50:04 (27.1 °C)	0.000	1.868	0.00	0.00	0.00	Method . BCL-Cond	284.18
BLK1			Determination start 2017-07-27 14:56:01 (27.7 °C)						Method . BCL-Cond	284.18
1720351-03@D	25	1290.10 (25.2 °C)	2017-07-27 14:57:52 (27.3 °C)	0.000	1.870	0.00	0.00	0.00	Method . BCL-Cond-pH-Alk	284.49
		4.90								284.49



2017-08-01 12:13:54 Page 10 22

Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol, ml	Cond, µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
<hr/>									
BLK1	Determination start 2017-07-27 15:03:57 (27.2 °C) 5.00								Method BCL-Cond
1720352-01@J	25	44951.60	7.29	0.000	18.094	0.00	0.00	2752.69	2752.69
<hr/>									
BLK1	Determination start 2017-07-27 15:16:34 (26.6 °C) 16.70								Method BCL-Cond
1720353-01@I	25	61979.40	7.62	0.000	18.634	0.00	0.00	2834.84	2834.84
<hr/>									
BLK1	Determination start 2017-07-27 15:29:31 (30.0 °C) 18.40								Method BCL-Cond
1720355-01@I	25	44568.90	7.42	0.000	19.180	0.00	0.00	2917.90	2917.90
<hr/>									
BLK1	Determination start 2017-07-27 15:42:21 (28.6 °C) 21.80								Method BCL-Cond
1720356-01@A	25	23925.40	7.81	0.000	6.506	0.00	0.00	989.77	989.77
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BLK1	Determination start 2017-07-27 15:44:22 (27.7 °C) 31.10								Method BCL-Cond



2017-08-01 12:13:54 Page 11 22

Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol, ml	Cond, µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
<hr/>									
1720360-01@A	25	(25.0 °C) 1131.40	2017-07-27 15:53:26 (27.0 °C)	0.000	0.428	0.00	0.00	0.00	Method . BCL-Cond-pH-Alk
BLK1		(27.1 °C) 10.20	2017-07-27 15:59:10						Method . BCL-Cond
<hr/>									
B5-BS1@COND		(24.9 °C) 316.80	Determination start 2017-07-27 16:00:49						Method . BCL-Cond
B5-BS2@PH		(26.9 °C) 7.01	Determination start 2017-07-27 16:02:36						Method . BCL-pH
BLK1		2017-07-27 16:05:58 (24.7 °C) 210.10	Determination start 2017-07-27 16:11:34 (24.4 °C) 2.00	0.410	1.206	0.00	0.076	0.076	Method . BCL-Cond-pH-Alk
1720393-01@A	25	(24.3 °C) 1868.20	2017-07-27 16:16:25 (26.6 °C)	8.16	0.000	1.388	0.00	0.00	Method . BCL-Cond-pH-Alk
DUP1	25	(24.0 °C) 1871.10	2017-07-27 16:21:49 (26.5 °C)	8.15	0.000	1.348	0.00	0.00	Method . BCL-Cond-pH-Alk
1720400-01@E	50	(24.0 °C) 994.50	2017-07-27 16:27:37 (26.1 °C)	7.98	0.000	4.672	0.00	0.00	Method . BCL-Cond-pH-Alk
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2017-08-01 12:13:54

Page 12 22

Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol, ml	Cond, µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-27 16:33:42 (24.3 °C) (26.6 °C)									
1720400-03@E	25	1036.00	8.05	0.000	2.514	0.00	0.00	0.00	382.46
Determination start 2017-07-27 16:39:14 (24.7 °C) (26.8 °C)									
1720400-05@D	25	1049.90	8.03	0.000	1.978	0.00	0.00	0.00	300.92
Determination start 2017-07-27 16:44:54 (24.7 °C) (26.6 °C)									
1720400-07@D	50	945.90	8.12	0.000	4.668	0.00	0.00	0.00	355.08
Determination start 2017-07-27 16:50:59 (24.8 °C) (26.6 °C)									
1720400-09@D	50	879.40	8.15	0.000	4.514	0.00	0.00	0.00	343.36
Determination start 2017-07-27 16:57:01 (24.6 °C) (26.5 °C)									
1720400-11@D	50	919.20	7.99	0.000	4.302	0.00	0.00	0.00	327.24
Determination start 2017-07-27 17:03:02 (24.0 °C) (26.5 °C)									
1720400-13@D	25	1019.50	8.09	0.000	2.274	0.00	0.00	0.00	345.95
Determination start 2017-07-27 17:08:25 (30.9 °C)									
BLK1		6.50							
Determination start 2017-07-27 17:10:24 (24.3 °C) (26.1 °C)									
1720405-01@G	50	698.50	7.98	0.000	2.908	0.00	0.00	0.00	221.20
Determination start 2017-07-27 17:32:05									
BLK1									



2017-08-01 12:13:54 Page 13 22

Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol, ml	Cond, µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
<hr/>									
BLK1	Determination start 2017-07-27 17:35:25 (28.1 °C) 5.80	Titer 0.076	Method BCL-Cond-pH-Alk						
1720543-01@A	50	(24.0 °C) 802.20	(25.8 °C) 7.57	0.000	2.746	0.00	0.00	208.88	208.88
<hr/>									
BLK1	Determination start 2017-07-27 17:41:18 (27.4 °C) 6.30	Titer 0.076	Method BCL-Cond-pH-Alk						
B6-BS1@COND	Determination start 2017-07-27 17:42:57 (24.0 °C) 316.00	Titer 0.076	Method BCL-Cond-pH-Alk						
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B6-BS2@PH	Determination start 2017-07-27 17:44:35 (26.3 °C) 7.00	Titer 0.076	Method BCL-Cond-pH-Alk						
B6-BS3 @ ALK	50	(23.7 °C) 197.70	(26.1 °C) 9.94	0.382	1.222	0.00	58.11	34.84	92.95
<hr/>									
B6-BLK1	Determination start 2017-07-27 17:53:24 (23.4 °C) 1.70	(25.9 °C) 4.78	0.000	0.020	0.00	0.00	0.00	1.52	1.52
<hr/>									
1720598-01@A	Determination start 2017-07-27 17:58:40 (22.6 °C) 233.00	(25.4 °C) 8.23	0.000	0.782	0.00	0.00	59.48	59.48	
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B6-DUP1	Determination start 2017-07-27 18:03:58 (22.4 °C) 233.80	(25.2 °C) 8.22	0.000	0.766	0.00	0.00	58.27	58.27	
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2017-08-01 12:13:54 Page 14 22

Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol, ml	Cond, µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
<hr/>									
BLK1	Determination start 2017-07-27 18:09:32 (26.3 °C) 5.60								Method . BCL-Cond
1720598-02@A	50	243.50	(23.0 °C)	0.000	0.822	0.00	0.00	62.53	62.53
<hr/>									
BLK1	Determination start 2017-07-27 18:16:17 (26.1 °C) 5.60								Method . BCL-Cond
1720598-03@A	50	238.90	(23.4 °C)	0.000	0.812	0.00	0.00	61.77	61.77
<hr/>									
BLK1	Determination start 2017-07-27 18:23:10 (25.9 °C) 5.60								Method . BCL-Cond
1720604-01@A	50	179.70	(23.8 °C)	0.098	0.646	0.00	14.91	34.23	49.14
<hr/>									
BLK1	Determination start 2017-07-27 18:30:48 (25.8 °C) 5.70								Method . BCL-Cond
1720604-02@A	50	184.60	(23.9 °C)	0.000	0.702	0.00	0.00	53.40	53.40
<hr/>									
BLK1	Determination start 2017-07-27 18:38:11 (25.6 °C) 5.60								Method . BCL-Cond



2017-08-01 12:13:54 Page 15 22

Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol, ml	Cond, $\mu\text{mhos/cm}$	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-27 18:39:52 (23.6 °C) (25.8 °C)									
1720604-03@A	50	183.60	7.76	0.000	0.696	0.00	0.00	0.00	52.94
Determination start 2017-07-27 18:45:38 (25.5 °C)									
BLK1		5.60							
Determination start 2017-07-27 18:47:19 (23.1 °C) (26.1 °C)									
1720108-08@A	25	1794.20	8.10	0.000	3.446	0.00	0.00	0.00	524.25
Determination start 2017-07-27 18:53:28 (25.4 °C)									
BLK1		9.40							
Determination start 2017-07-27 18:55:09 (23.0 °C) (25.5 °C)									
1720140-01@A	50	8.10	6.52	0.000	0.076	0.00	0.00	0.00	5.78
Determination start 2017-07-27 19:00:49 (25.3 °C)									
BLK1		5.60							
Determination start 2017-07-27 19:02:30 (22.9 °C) (25.9 °C)									
1720313-05@X	25	1067.30	6.54	0.000	2.774	0.00	0.00	0.00	422.02
Determination start 2017-07-27 19:10:06 (25.2 °C)									
BLK1		7.50							
Determination start 2017-07-27 19:11:47 (23.3 °C) (25.7 °C)									
1720313-06@H	50	666.50	7.29	0.000	3.812	0.00	0.00	0.00	289.96



2017-08-01 12:13:54 Page 16 22

Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol, ml	Cond, $\mu\text{mhos/cm}$	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
<hr/>									
BLK1	Determination start 2017-07-27 19:17:55 (25.2 °C) 7.10								Method . BCL-Cond
B7-BS1@COND	Determination start 2017-07-27 19:34:34 (23.7 °C) 317.80								Method . BCL-Cond
<hr/>									
B7-BS2@PH	Determination start 2017-07-27 19:21:17 (26.3 °C) 7.00								Method . BCL-pH
B7-BS3@ALK	Determination start 2017-07-27 19:24:33 (23.9 °C) 207.80	(26.1 °C)	9.98	0.378	1.208	0.00	57.51	34.38	91.89
BLK1	Determination start 2017-07-27 19:30:06 (23.7 °C) 1.70	(26.0 °C)	4.96	0.000	0.024	0.00	0.00	1.83	1.83
1720155-01@A	Determination start 2017-07-27 19:35:33 (23.9 °C) 162.20	(26.0 °C)	6.65	0.000	0.202	0.00	0.00	15.37	15.37
DUP1	Determination start 2017-07-27 19:40:33 (24.3 °C) 162.00	(26.3 °C)	6.71	0.000	0.194	0.00	0.00	14.76	14.76
BLK1	Determination start 2017-07-27 19:46:09 (25.1 °C) 6.10								Method . BCL-Cond
1720147-15@B	Determination start 2017-07-27 19:47:51 (24.3 °C) 1049.10	(26.5 °C)	7.42	0.000	3.802	0.00	0.00	578.41	578.41



Sample ID	Sample Vol, ml	Cond, $\mu\text{mhos/cm}$	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk	Alkalinity as CaCO_3 , mg/l
BLK1										
Determination start	2017-07-27 19:53:42 (25.1 °C)									
1720147-16@B	50	859.00	(24.3 °C) 7.50	0.000	5.812	0.00	0.00	0.00	442.10	442.10
BLK1										
Determination start	2017-07-27 20:02:16 (25.0 °C)									
1720147-17@B	50	369.60	(24.2 °C) 8.13	0.000	2.208	0.00	0.00	0.00	167.95	167.95
BLK1										
Determination start	2017-07-27 20:03:57 (25.0 °C)									
1720147-18@B	50	828.10	(24.4 °C) 8.24	0.000	5.760	0.00	0.00	0.00	438.14	438.14
BLK1										
Determination start	2017-07-27 20:11:06 (25.0 °C)									
1720147-19@B	50	837.60	(24.4 °C) 8.08	0.000	5.764	0.00	0.00	0.00	438.45	438.45
BLK1										



2017-08-01 12:13:54 Page 18 22

Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol, ml	Cond, $\mu\text{mhos/cm}$	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
<hr/>									
1720154-01@D	Determination start 2017-07-27 20:26:58 (24.2 °C) 18295.90	7.77	0.000	1.852	0.00	0.076	Method .	BCL-Cond-pH-Alk	
BLK1	Determination start 2017-07-27 20:33:13 (25.0 °C) 27.50						Method .	BCL-Cond	
<hr/>									
1720154-02@D	Determination start 2017-07-27 20:35:13 (24.3 °C) 6985.80	7.67	0.000	2.360	0.00	0.076	Method .	BCL-Cond-pH-Alk	
BLK1	Determination start 2017-07-27 20:41:33 (25.0 °C) 18.00						Method .	BCL-Cond	
<hr/>									
1720154-03@D	Determination start 2017-07-27 20:43:34 (24.4 °C) 15076.10	8.04	0.000	2.748	0.00	0.076	Method .	BCL-Cond-pH-Alk	
BLK1	Determination start 2017-07-27 20:49:59 (25.0 °C) 21.60						Method .	BCL-Cond	
<hr/>									
1720154-04@D	Determination start 2017-07-27 20:51:59 (24.4 °C) 21713.60	7.77	0.000	1.800	0.00	0.076	Method .	BCL-Cond-pH-Alk	
BLK1	Determination start 2017-07-27 20:58:11 (25.0 °C) 28.00						Method .	BCL-Cond	
<hr/>									
B8-BS1@COND	Determination start 2017-07-27 21:00:08 (24.3 °C) 321.50						Method .	BCL-Cond	



2017-08-01 12:13:54 Page 19 22

Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol, ml	Cond, µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
<hr/>									
B8-BS2@PH	Determination start 2017-07-27 21:01:49 (26.5 °C) 7.00								Method . BCL-pH
B8-BS3@ALK	50	(24.3 °C) 215.10	(26.2 °C) 9.94	0.370	1.234	0.00	56.29	37.58	93.87
<hr/>									
B8-BLK1	50	(24.2 °C) 2.60	(26.1 °C) 4.78	0.000	0.016	0.00	0.00	1.22	1.22
1720210-01@D	25	(24.1 °C) 6661.90	(26.3 °C) 7.64	0.000	0.766	0.00	0.00	116.53	116.53
B8-DUP1	25	(24.0 °C) 6670.10	(26.4 °C) 7.65	0.000	0.750	0.00	0.00	114.10	114.10
1720188-01@A	25	(24.2 °C) 1070.50	(26.4 °C) 7.59	0.000	0.806	0.00	0.00	122.62	122.62
BLK1	Determination start 2017-07-27 21:33:08 (25.1 °C) 15.50								Method . BCL-Cond
1720210-02@D	25	(24.0 °C) 4368.60	(26.3 °C) 7.79	0.000	0.872	0.00	0.00	132.66	132.66
BLK1	Determination start 2017-07-27 21:40:58 (25.0 °C) 18.90								Method . BCL-Cond



2017-08-01 12:13:54 Page 20 22

Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol, ml	Cond, $\mu\text{mhos/cm}$	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
<hr/>									
1720210-03@D	Determination start 2017-07-27 21:42:59 (24.1 °C) (26.3 °C)				Titer 0.076				Method . BCL-Cond-pH-Alk
	25	4435.80	7.82	0.000	0.894	0.00	0.00	0.00	136.01
<hr/>									
BLK1	Determination start 2017-07-27 21:48:59 (25.0 °C)								Method . BCL-Cond
					Titer 0.076				
1720258-01@A	Determination start 2017-07-27 21:51:00 (24.3 °C) (26.4 °C)				0.298	2.604	0.00	394.94	1.22
	25	1587.50	10.69						396.15
<hr/>									
BLK1	Determination start 2017-07-27 21:57:28 (24.9 °C)								Method . BCL-Cond
					Titer 0.076				
1720258-02@A	Determination start 2017-07-27 21:59:09 (24.3 °C) (26.4 °C)				0.666	2.494	0.00	202.64	176.78
	25	1586.40	9.68						379.42
<hr/>									
BLK1	Determination start 2017-07-27 22:05:44 (24.8 °C)								Method . BCL-Cond
					Titer 0.076				
1720258-03@A	Determination start 2017-07-27 22:07:35 (24.1 °C) (26.3 °C)				1.930	0.00	0.00	293.62	293.62
	25	2334.50	6.82	0.000					
<hr/>									
BLK1	Determination start 2017-07-27 22:14:02 (24.9 °C)								Method . BCL-Cond
					Titer 0.076				
1720259-01@A	Determination start 2017-07-27 22:16:02 (24.4 °C) (26.5 °C)				1.348	0.00	0.00	205.07	205.07
	25	1104.40	5.82	0.000					



2017-08-01 12:13:54 Page 21 22

Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol, ml	Cond, µmhos/cm	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
<hr/>									
BLK1	Determination start 2017-07-27 22:22:07 (25.0 °C) 16.70	Determination start 2017-07-27 22:24:07 (24.4 °C) 26460.60	Determination start 2017-07-27 22:32:30 (25.2 °C) 32.60	Titer 0.076	Method . BCL-Cond				
1720267-01@D	25	7.59	0.000	13.162	0.00	0.00	0.00	0.00	2002.37
<hr/>									
BLK1	Determination start 2017-07-27 22:34:30 (24.6 °C) 946.80	Determination start 2017-07-27 22:41:41 (25.1 °C) 17.70	Determination start 2017-07-27 22:43:38 (24.6 °C) 10169.30	Titer 0.076	Method . BCL-Cond				
1720313-07@A	50	6.87	0.000	5.652	0.00	0.00	0.00	0.00	429.93
<hr/>									
BLK1	Determination start 2017-07-27 22:45:40 (26.3 °C) 9.89	Determination start 2017-07-27 22:51:08 (26.0 °C) 9.94	Determination start 2017-07-27 22:56:36 (24.3 °C) 322.10	Titer 0.076	Method . BCL-Cond				
ALK	50	0.344	1.200	0.00	52.33	38.95	54.46	36.97	91.43
<hr/>									
ALK	50	197.50	0.358	1.202	0.00	52.33	38.95	54.46	36.97
303	Determination start 2017-07-27 22:56:36 (24.3 °C) 322.10	Determination start 2017-07-27 22:56:36 (24.3 °C) 322.10	Determination start 2017-07-27 22:56:36 (24.3 °C) 322.10	Titer 0.076	Method . BCL-Cond				



2017-08-01 12:13:54

Page 22 22

Alkalinity as CaCO₃, mg/l

Sample ID	Sample Vol, ml	Cond, $\mu\text{mhos/cm}$	pH	P, ml	T, ml	Hydroxide	Carbonate	Bicarbonate	Total Alk
Determination start 2017-07-27 22:58:15									
303		(24.4 °C)							
Method BCL-Cond									
Determination start 2017-07-27 23:00:01									
303		(24.5 °C)							
Method BCL-Cond									
Determination start 2017-07-27 23:01:42									
7.00		(26.4 °C)							
Method BCL-pH									
Determination start 2017-07-27 23:05:00									
7.00		(26.5 °C)							
Method BCL-pH									
Determination start 2017-07-27 23:08:14									
7.00		(26.6 °C)							
Method BCL-pH									



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Batch Information



PREPARATION BENCH SHEET

B[G2107]

BC Laboratories

Printed: 8/24/2017 10:33:44AM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720267-02 D	i310.1w Tot Alk as CaCO3	7/27/2017 8:30AM	RML	50	50					
1720267-03 D	i310.1w Tot Alk as CaCO3	7/27/2017 8:30AM	RML	50	50					
1720267-04 G	i310.1w Tot Alk as CaCO3	7/27/2017 8:30AM	RML	50	50					
1720267-08 G	i120.1w EC	7/27/2017 8:30AM		50	50					
1720267-08 G	i150.1w pH	7/27/2017 8:30AM		50	50					
1720267-08 G	i310.1w CO3	7/27/2017 8:30AM		50	50					
1720267-08 G	i310.1w HCO3	7/27/2017 8:30AM		50	50					
1720267-08 G	i310.1w OH	7/27/2017 8:30AM		50	50					
1720267-08 G	i310.1w Tot Alk as CaCO3	7/27/2017 8:30AM	RML	50	50					
1720267-08 G	iSM2320Bw CO3	7/27/2017 8:30AM		50	50					
1720267-08 G	iSM2320Bw HCO3	7/27/2017 8:30AM		50	50					
1720267-09 G	i310.1w Tot Alk as CaCO3	7/27/2017 8:30AM	RML	50	50					
1720267-10 G	i310.1w Tot Alk as CaCO3	7/27/2017 8:30AM	RML	50	50					
1720267-11 G	i310.1w Tot Alk as CaCO3	7/27/2017 8:30AM	RML	50	50					
1720269-01 D	i150.1w pH	7/27/2017 8:30AM	RML	50	50					
1720269-01 D	i120.1w EC	7/27/2017 8:30AM	RML	50	50					
1720277-01 G	i120.1w EC	7/27/2017 8:30AM	RML	50	50					
1720277-01 G	i150.1w pH	7/27/2017 8:30AM	RML	50	50					
1720277-01 G	i310.1w CO3	7/27/2017 8:30AM	RML	50	50					
1720277-01 G	i310.1w HCO3	7/27/2017 8:30AM	RML	50	50					
1720277-01 G	i310.1w OH	7/27/2017 8:30AM	RML	50	50					
1720312-01 A	iSM2320Bw HCO3	7/27/2017 8:30AM	RML	50	50					
1720312-01 A	iSM2320Bw CO3	7/27/2017 8:30AM	RML	50	50					
B[G2107-BLK1]	QC	7/27/2017 8:30AM	RML	50	50		7G27012			
B[G2107-BS1]	QC	7/27/2017 8:30AM	RML	50	50			50000		



PREPARATION BENCH SHEET

B[G2107]

BC Laboratories

Printed: 8/24/2017 10:33:44AM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
B[G2107-BS2	QC	7/27/2017 8:30AM	RML	50	50	7G11062		50000		
B[G2107-BS3	QC	7/27/2017 8:30AM	RML	50	50	7G27013		5000		
B[G2107-DUP1	QC	7/27/2017 8:30AM	RML	50	50		1720267-08			

Spike Mixes	Description	Solvent	Prepared	Expires
7G11062	pH 7 LCSW Check	H2O	7/11/2017 by ** Vendor **	2/28/2019
7G27012	EC LCSW WORKING	H2O (DI)	7/26/2017 by Rosa Ledesma	1/26/2018
7G27013	ALK NA2CO3	H2O	5/31/2017 by Rosa Ledesma	10/31/2017



PREPARATION BENCH SHEET

B[G2114]

BC Laboratories

Printed: 8/24/2017 10:33:44AM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720188-01 A	i150.1w pH	7/27/2017 3:00PM	RML	50	50					
1720188-01 A	i120.1w EC	7/27/2017 3:00PM	RML	50	50					
1720210-01 D	i120.1w EC	7/27/2017 3:00PM		50	50					
1720210-01 D	i150.1w pH	7/27/2017 3:00PM		50	50					
1720210-01 D	i310.1w CO3	7/27/2017 3:00PM	RML	50	50					
1720210-01 D	i310.1w HCO3	7/27/2017 3:00PM	RML	50	50					
1720210-01 D	i310.1w Tot Alk as CaCO3	7/27/2017 3:00PM	RML	50	50					
1720210-01 D	ISM2510Bw EC	7/27/2017 3:00PM		50	50					
1720210-02 D	i310.1w CO3	7/27/2017 3:00PM	RML	50	50					
1720210-02 D	i310.1w HCO3	7/27/2017 3:00PM	RML	50	50					
1720210-02 D	i310.1w Tot Alk as CaCO3	7/27/2017 3:00PM	RML	50	50					
1720210-03 D	i310.1w Tot Alk as CaCO3	7/27/2017 3:00PM	RML	50	50					
1720210-03 D	i310.1w CO3	7/27/2017 3:00PM	RML	50	50					
1720210-03 D	i310.1w HCO3	7/27/2017 3:00PM	RML	50	50					
1720258-01 A	ISM2510Bw EC	7/27/2017 3:00PM	RML	50	50					
1720258-02 A	ISM2510Bw EC	7/27/2017 3:00PM	RML	50	50					
1720258-03 A	ISM2510Bw EC	7/27/2017 3:00PM	RML	50	50					
1720259-01 A	i120.1w EC	7/27/2017 3:00PM	RML	50	50					
1720267-01 D	i310.1w Tot Alk as CaCO3	7/27/2017 3:00PM	RML	50	50					
1720313-07 H	i310.1w Tot Alk as CaCO3	7/27/2017 3:00PM	RML	50	50					
B[G2114-BLK1]	QC	7/27/2017 3:00PM	RML	50	50					
B[G2114-BS1]	QC	7/27/2017 3:00PM	RML	50	50	7G27012		50000		
B[G2114-BS2]	QC	7/27/2017 3:00PM	RML	50	50	7G11062		50000		
B[G2114-BS3]	QC	7/27/2017 3:00PM	RML	50	50	7G27013		5000		
B[G2114-DUP1]	QC	7/27/2017 3:00PM	RML	50	50		1720210-01			

Spike Mixes	Description	Solvent	Prepared	Expires
7G11062	pH 7 LCSW Check	H2O	7/11/2017 by ** Vendor **	2/28/2019
7G27012	EC LCSW WORKING	H2O (DI)	7/26/2017 by Rosa Ledesma	1/26/2018
7G27013	ALK NA2CO3	H2O	5/31/2017 by Rosa Ledesma	10/31/2017



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Sequence Information



ANALYSIS SEQUENCE

1713352

Instrument: MET-1
Calibration ID: Sequence Date: 07/27/2017 Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713352-ICV1	QC		1		7B07020		
B[G2107-BS1]	QC		2				
B[G2107-BS2]	QC		3				
B[G2107-BLK1]	QC		4				
1720267-08	i120.1w EC	G	5				BatchQC
1720267-08	i150.1w pH	G	5				BatchQC
1720267-08	i310.1w CO3	G	5				BatchQC
1720267-08	i310.1w HCO3	G	5				BatchQC
1720267-08	i310.1w OH	G	5				BatchQC
1720267-08	i310.1w Tot Alk as CaCO3	G	5				
1720267-08	iSM2320Bw CO3	G	5				BatchQC
1720267-08	iSM2320Bw HCO3	G	5				BatchQC
B[G2107-DUP1]	QC		6				
1720267-02	i310.1w Tot Alk as CaCO3	D	7				
1720267-03	i310.1w Tot Alk as CaCO3	D	8				
1720267-04	i310.1w Tot Alk as CaCO3	G	9				
1720267-09	i310.1w Tot Alk as CaCO3	G	10				
1720267-10	i310.1w Tot Alk as CaCO3	G	11				
1720267-11	i310.1w Tot Alk as CaCO3	G	12				
1720269-01	i120.1w EC	D	13				
1720269-01	i150.1w pH	D	13				
1720277-01	i120.1w EC	G	14				
1720277-01	i150.1w pH	G	14				
1720277-01	i310.1w CO3	G	14				
1720277-01	i310.1w HCO3	G	14				
1720277-01	i310.1w OH	G	14				
1720312-01	iSM2320Bw CO3	A	15				
1720312-01	iSM2320Bw HCO3	A	15				
B[G2108-BS1]	QC		16				
B[G2108-BS2]	QC		17				
B[G2108-BS3]	QC		18				
B[G2108-BLK1]	QC		19				
1720318-01	i120.1w EC	D	20				BatchQC
1720318-01	i150.1w pH	D	20				
1720318-01	i310.1w CO3 Alk as CaCO3	D	20				
1720318-01	i310.1w HCO3 Alk as CaCO3	D	20				
1720318-01	i310.1w Tot Alk as CaCO3	D	20				
1720318-01	iSM2320Bw CO3	D	20				BatchQC
1720318-01	iSM2320Bw CO3 Alk as CaCO3	D	20				BatchQC



ANALYSIS SEQUENCE

1713352

Instrument: MET-1
Calibration ID: Sequence Date: 07/27/2017 Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720318-01	iSM2320Bw HCO3	D	20				BatchQC
1720318-01	iSM2320Bw HCO3 Alk as CaCO3	D	20				BatchQC
1720318-01	iSM2320Bw OH	D	20				BatchQC
1720318-01	ISM2510Bw EC	D	20				
1720318-01	iSM4500HBw pH	D	20				BatchQC
B[G2108-DUP1]	QC		21				
1720312-02	ISM2510Bw EC	A	22				
1720312-02	iSM4500HBw pH	A	22				
1720315-01	iSM2320Bw CO3 Alk as CaCO3	D	23				
1720315-01	iSM2320Bw HCO3 Alk as CaCO3	D	23				
1720318-02	i150.1w pH	D	24				
1720318-02	i310.1w CO3 Alk as CaCO3	D	24				
1720318-02	i310.1w HCO3 Alk as CaCO3	D	24				
1720318-02	i310.1w Tot Alk as CaCO3	D	24				
1720318-02	ISM2510Bw EC	D	24				
1720318-03	i150.1w pH	D	25				
1720318-03	i310.1w CO3 Alk as CaCO3	D	25				
1720318-03	i310.1w HCO3 Alk as CaCO3	D	25				
1720318-03	i310.1w Tot Alk as CaCO3	D	25				
1720318-03	ISM2510Bw EC	D	25				
1720318-04	i150.1w pH	D	26				
1720318-04	i310.1w CO3 Alk as CaCO3	D	26				
1720318-04	i310.1w HCO3 Alk as CaCO3	D	26				
1720318-04	i310.1w Tot Alk as CaCO3	D	26				
1720318-04	ISM2510Bw EC	D	26				
1720337-02	i150.1w pH	G	27				
1720337-02	iSM2320Bw CO3	G	27				
1720337-02	iSM2320Bw HCO3	G	27				
1720337-02	iSM2320Bw OH	G	27				
1720337-02	ISM2510Bw EC	G	27				
1720342-02	i120.1w EC	A	28				
1720343-01	i150.1w pH	D	29				
1720343-01	iSM2320Bw CO3	D	29				
1720343-01	iSM2320Bw HCO3	D	29				
1720343-01	iSM2320Bw OH	D	29				
1720343-01	ISM2510Bw EC	D	29				
B[G2109-BS1]	QC		30				
B[G2109-BS2]	QC		31				
B[G2109-BS3]	QC		32				



ANALYSIS SEQUENCE

1713352

Instrument: MET-1
Calibration ID: Sequence Date: 07/27/2017 Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
B[G2109-BLK1]	QC		33				
1720350-01	i120.1w EC	A	34				
1720350-01	i150.1w pH	A	34				
1720350-01	i310.1w CO3	A	34				
1720350-01	i310.1w HCO3	A	34				
1720350-01	i310.1w OH	A	34				
1720350-01	i310.1w Tot Alk as CaCO3	A	34				BatchQC
1720350-01	iSM4500HBw pH	A	34				BatchQC
B[G2109-DUP1]	QC		35				
1720344-01	i120.1w EC	A	36				
1720344-01	i310.1w Tot Alk as CaCO3	A	36				
1720344-01	iSM4500HBw pH	A	36				
1720344-02	i120.1w EC	A	37				
1720344-02	i310.1w Tot Alk as CaCO3	A	37				
1720344-02	iSM4500HBw pH	A	37				
1720345-01	i120.1w EC	A	38				
1720345-01	i150.1w pH	A	38				
1720345-01	i310.1w Tot Alk as CaCO3	A	38				
1720350-02	i120.1w EC	A	39				
1720350-02	i150.1w pH	A	39				
1720350-02	i310.1w CO3	A	39				
1720350-02	i310.1w HCO3	A	39				
1720350-02	i310.1w OH	A	39				
1720350-03	i120.1w EC	A	40				
1720350-03	i150.1w pH	A	40				
1720350-03	i310.1w CO3	A	40				
1720350-03	i310.1w HCO3	A	40				
1720350-03	i310.1w OH	A	40				
1720350-04	i120.1w EC	A	41				
1720350-04	i150.1w pH	A	41				
1720350-04	i310.1w CO3	A	41				
1720350-04	i310.1w HCO3	A	41				
1720350-04	i310.1w OH	A	41				
1720350-05	i120.1w EC	A	42				
1720350-05	i150.1w pH	A	42				
1720350-05	i310.1w CO3	A	42				
1720350-05	i310.1w HCO3	A	42				
1720350-05	i310.1w OH	A	42				
1720350-06	i120.1w EC	A	43				



ANALYSIS SEQUENCE

1713352

Instrument: MET-1
Calibration ID: Sequence Date: 07/27/2017 Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720350-06	i150.1w pH	A	43				
1720350-06	i310.1w CO3	A	43				
1720350-06	i310.1w HCO3	A	43				
1720350-06	i310.1w OH	A	43				
1720350-07	i120.1w EC	A	44				
1720350-07	i150.1w pH	A	44				
1720350-07	i310.1w CO3	A	44				
1720350-07	i310.1w HCO3	A	44				
1720350-07	i310.1w OH	A	44				
B[G2110-BS1]	QC		45				
B[G2110-BS2]	QC		46				
B[G2110-BS3]	QC		47				
B[G2110-BLK1]	QC		48				
1720350-08	i120.1w EC	A	49				
1720350-08	i150.1w pH	A	49				
1720350-08	i310.1w CO3	A	49				
1720350-08	i310.1w HCO3	A	49				
1720350-08	i310.1w HCO3 Alk as CaCO3	A	49				BatchQC
1720350-08	i310.1w OH	A	49				
1720350-08	iSM2320Bw CO3 Alk as CaCO3	A	49				BatchQC
1720350-08	iSM2320Bw HCO3 Alk as CaCC	A	49				BatchQC
1720350-08	iSM2320Bw OH Alk as CaCO3	A	49				BatchQC
1720350-08	iSM2320Bw Tot Alk as CaCO3	A	49				BatchQC
B[G2110-DUP1]	QC		50				
1720350-09	i120.1w EC	A	51				
1720350-09	i150.1w pH	A	51				
1720350-09	i310.1w CO3	A	51				
1720350-09	i310.1w HCO3	A	51				
1720350-09	i310.1w OH	A	51				
1720337-01	i150.1w pH	A	52				
1720337-01	iSM2320Bw CO3	A	52				
1720337-01	iSM2320Bw HCO3	A	52				
1720337-01	iSM2320Bw OH	A	52				
1720337-01	ISM2510Bw EC	A	52				
1720351-01	i310.1w HCO3 Alk as CaCO3	D	53				
1720351-02	i310.1w HCO3 Alk as CaCO3	D	54				
1720351-03	i310.1w HCO3 Alk as CaCO3	D	55				
1720352-01	i150.1w pH	I	56				
1720352-01	iSM2320Bw CO3 Alk as CaCO3	I	56				



ANALYSIS SEQUENCE

1713352

Instrument: MET-1

Calibration ID:

Sequence Date: 07/27/2017

Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720352-01	iSM2320Bw HCO3 Alk as CaCC	I	56				
1720352-01	iSM2320Bw OH Alk as CaCO3	I	56				
1720352-01	iSM2320Bw Tot Alk as CaCO3	I	56				
1720353-01	i150.1w pH	J	57				
1720353-01	iSM2320Bw CO3 Alk as CaCO3	J	57				
1720353-01	iSM2320Bw HCO3 Alk as CaCC	J	57				
1720353-01	iSM2320Bw OH Alk as CaCO3	J	57				
1720353-01	iSM2320Bw Tot Alk as CaCO3	J	57				
1720355-01	i150.1w pH	I	58				
1720355-01	iSM2320Bw CO3 Alk as CaCO3	I	58				
1720355-01	iSM2320Bw HCO3 Alk as CaCC	I	58				
1720355-01	iSM2320Bw OH Alk as CaCO3	I	58				
1720355-01	iSM2320Bw Tot Alk as CaCO3	I	58				
1720356-01	i120.1w EC	A	59				
1720356-01	i150.1w pH	A	59				
1720356-01	i310.1w CO3	A	59				
1720356-01	i310.1w HCO3	A	59				
1720356-01	i310.1w OH	A	59				
1720360-01	i150.1w pH	A	60				
B[G2111-BS1]	QC		61				
B[G2111-BS2]	QC		62				
B[G2111-BS3]	QC		63				
B[G2111-BLK1]	QC		64				
1720393-01	i120.1w EC PQL=1	A	65				BatchQC
1720393-01	i150.1w pH PQL=0.05	A	65				BatchQC
1720393-01	i310.1w CO3	A	65				BatchQC
1720393-01	i310.1w CO3 Alk as CaCO3 PQI	A	65				BatchQC
1720393-01	i310.1w HCO3	A	65				BatchQC
1720393-01	i310.1w HCO3 Alk as CaCO3 PQI	A	65				BatchQC
1720393-01	i310.1w OH Alk as CaCO3 PQI	A	65				BatchQC
1720393-01	i310.1w Tot Alk as CaCO3	A	65				BatchQC
1720393-01	iSM2320Bw HCO3	A	65				
1720393-01	iSM2320Bw Tot Alk as CaCO3	A	65				
1720393-01	iSM4500HBw pH	A	65				
B[G2111-DUP1]	QC		66				
1720400-01	i120.1w EC PQL=1	D	67				**
1720400-01	i150.1w pH PQL=0.05	D	67				**
1720400-01	i310.1w CO3 Alk as CaCO3 PQI	D	67				**
1720400-01	i310.1w HCO3 Alk as CaCO3 PQI	D	67				**



ANALYSIS SEQUENCE

1713352

Instrument: MET-1

Calibration ID:

Sequence Date: 07/27/2017

Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720400-01	i310.1w OH Alk as CaCO3 PQL	D	67				**
1720400-03	i120.1w EC PQL=1	D	68				**
1720400-03	i150.1w pH PQL=0.05	D	68				**
1720400-03	i310.1w CO3 Alk as CaCO3 PQI	D	68				**
1720400-03	i310.1w HCO3 Alk as CaCO3 PC	D	68				**
1720400-03	i310.1w OH Alk as CaCO3 PQL	D	68				**
1720400-05	i120.1w EC PQL=1	D	69				**
1720400-05	i150.1w pH PQL=0.05	D	69				**
1720400-05	i310.1w CO3 Alk as CaCO3 PQI	D	69				**
1720400-05	i310.1w HCO3 Alk as CaCO3 PC	D	69				**
1720400-05	i310.1w OH Alk as CaCO3 PQL	D	69				**
1720400-07	i120.1w EC PQL=1	D	70				**
1720400-07	i150.1w pH PQL=0.05	D	70				**
1720400-07	i310.1w CO3 Alk as CaCO3 PQI	D	70				**
1720400-07	i310.1w HCO3 Alk as CaCO3 PC	D	70				**
1720400-07	i310.1w OH Alk as CaCO3 PQL	D	70				**
1720400-09	i120.1w EC PQL=1	D	71				**
1720400-09	i150.1w pH PQL=0.05	D	71				**
1720400-09	i310.1w CO3 Alk as CaCO3 PQI	D	71				**
1720400-09	i310.1w HCO3 Alk as CaCO3 PC	D	71				**
1720400-09	i310.1w OH Alk as CaCO3 PQL	D	71				**
1720400-11	i120.1w EC PQL=1	D	72				**
1720400-11	i150.1w pH PQL=0.05	D	72				**
1720400-11	i310.1w CO3 Alk as CaCO3 PQI	D	72				**
1720400-11	i310.1w HCO3 Alk as CaCO3 PC	D	72				**
1720400-11	i310.1w OH Alk as CaCO3 PQL	D	72				**
1720400-13	i120.1w EC PQL=1	D	73				**
1720400-13	i150.1w pH PQL=0.05	D	73				**
1720400-13	i310.1w CO3 Alk as CaCO3 PQI	D	73				**
1720400-13	i310.1w HCO3 Alk as CaCO3 PC	D	73				**
1720400-13	i310.1w OH Alk as CaCO3 PQL	D	73				**
1720405-01	i310.1w Tot Alk as CaCO3	G	74				
1720543-01	i310.1w CO3	D	75				
1720543-01	i310.1w HCO3	D	75				
B[G2112-BS1]	QC		76				
B[G2112-BS2]	QC		77				
B[G2112-BS3]	QC		78				
B[G2112-BLK1]	QC		79				
1720598-01	i120.1w EC	A	80				BatchQC



ANALYSIS SEQUENCE

1713352

Instrument: MET-1
Calibration ID: Sequence Date: 07/27/2017 Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720598-01	i150.1w pH	A	80				
1720598-01	i310.1w Tot Alk as CaCO3	A	80				BatchQC
B[G2112-DUP1]	QC		81				
1720598-02	i150.1w pH	A	82				
1720598-03	i150.1w pH	A	83				
1720604-01	i150.1w pH	A	84				
1720604-02	i150.1w pH	A	85				
1720604-03	i150.1w pH	A	86				
1720108-08	i120.1w EC	A	87				
1720140-01	i150.1w pH	B	88				RUSH 6 DAY
1720313-05	i310.1w Tot Alk as CaCO3	V	89				
1720313-06	i310.1w Tot Alk as CaCO3	H	90				
B[G2113-BS1]	QC		91				
B[G2113-BS2]	QC		92				
B[G2113-BS3]	QC		93				
B[G2113-BLK1]	QC		94				
1720155-01	i150.1w pH	A	95				
1720155-01	i310.1w HCO3 Alk as CaCO3	A	95				BatchQC
1720155-01	iSM2320Bw CO3	A	95				
1720155-01	iSM2320Bw CO3 Alk as CaCO3	A	95				BatchQC
1720155-01	iSM2320Bw HCO3	A	95				
1720155-01	iSM2320Bw HCO3 Alk as CaCC	A	95				BatchQC
1720155-01	iSM2320Bw OH	A	95				
1720155-01	ISM2510Bw EC	A	95				
B[G2113-DUP1]	QC		96				
1720147-15	iSM2320Bw CO3 Alk as CaCO3	A	97				
1720147-15	iSM2320Bw HCO3 Alk as CaCC	A	97				
1720147-15	ISM2510Bw EC	A	97				
1720147-16	iSM2320Bw CO3 Alk as CaCO3	A	98				
1720147-16	iSM2320Bw HCO3 Alk as CaCC	A	98				
1720147-16	ISM2510Bw EC	A	98				
1720147-17	iSM2320Bw CO3 Alk as CaCO3	A	99				
1720147-17	iSM2320Bw HCO3 Alk as CaCC	A	99				
1720147-17	ISM2510Bw EC	A	99				
1720147-18	iSM2320Bw CO3 Alk as CaCO3	A	100				
1720147-18	iSM2320Bw HCO3 Alk as CaCC	A	100				
1720147-18	ISM2510Bw EC	A	100				
1720147-19	iSM2320Bw CO3 Alk as CaCO3	A	101				
1720147-19	iSM2320Bw HCO3 Alk as CaCC	A	101				



ANALYSIS SEQUENCE

1713352

Instrument: MET-1

Calibration ID:

Sequence Date: 07/27/2017

Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720147-19	ISM2510Bw EC	A	101				
1720154-01	i310.1w HCO3 Alk as CaCO3	D	102				
1720154-02	i310.1w HCO3 Alk as CaCO3	D	103				
1720154-03	i310.1w HCO3 Alk as CaCO3	D	104				
1720154-04	i310.1w HCO3 Alk as CaCO3	D	105				
B[G2114-BS1]	QC		106				
B[G2114-BS2]	QC		107				
B[G2114-BS3]	QC		108				
B[G2114-BLK1]	QC		109				
1720210-01	i120.1w EC	D	110				BatchQC
1720210-01	i150.1w pH	D	110				BatchQC
1720210-01	i310.1w CO3	D	110				
1720210-01	i310.1w HCO3	D	110				
1720210-01	i310.1w Tot Alk as CaCO3	D	110				
1720210-01	ISM2510Bw EC	D	110				BatchQC
B[G2114-DUP1]	QC		111				
1720188-01	i120.1w EC	A	112				
1720188-01	i150.1w pH	A	112				
1720210-02	i310.1w CO3	D	113				
1720210-02	i310.1w HCO3	D	113				
1720210-02	i310.1w Tot Alk as CaCO3	D	113				
1720210-03	i310.1w CO3	D	114				
1720210-03	i310.1w HCO3	D	114				
1720210-03	i310.1w Tot Alk as CaCO3	D	114				
1720258-01	ISM2510Bw EC	A	115				
1720258-02	ISM2510Bw EC	A	116				
1720258-03	ISM2510Bw EC	A	117				
1720259-01	i120.1w EC	A	118				
1720267-01	i310.1w Tot Alk as CaCO3	D	119				
1720313-07	i310.1w Tot Alk as CaCO3	H	120				
B[G2107-BS3]	QC		121				



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG: 17-20267

Class: WET

Method: EPA-353.2



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSES DATA PACKAGE COVER PAGE**EPA-353.2**

Laboratory: BC Laboratories

SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Client Sample Id:
26PZ01_170724
26PZ02_170724
26PZ03_170724
27EW-01_170724
27MW06_170724
27MW07_170724
27MW08_170724
27MW09_170724

Lab Sample Id:
1720267-01
1720267-02
1720267-03
1720267-04
1720267-08
1720267-09
1720267-10
1720267-11

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: Sara Guron Name: Sara Guron
Date: 08-24-2017 Title: QA/QC Manager



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS**EPA-353.2****Laboratory:** BC Laboratories**SDG:** 17-20267**Client:** AMEC Environmental & Infrastructure- \$AMCN**Project:** Alameda**Matrix:** Water**Instrument:** KONE-1

Analyte	DL	LOD	LOQ	Units
Nitrite as N	0.01	0.03	0.05	mg/L
Nitrite as NO2	0.04	0.1	0.17	mg/L



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-353.2

26PZ01_170724

Laboratory: BC Laboratories

SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720267-01

File ID: 170725 0945 NO2-110

Sampled: 07/24/17 11:16

Prepared: 07/25/17 09:45

Analyzed: 07/25/17 10:34

Solids: 0.00

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Batch: B[G2225

Sequence: 1713243

Calibration: UNASSIGNED

Instrument: KONE-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
14797-65-0	Nitrite as N	0.030	0.010	0.030	0.050	1	U	EPA-353.2



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**INORGANIC ANALYSIS DATA SHEET
EPA-353.2****26PZ02_170724**Laboratory: BC LaboratoriesSDG: 17-20267Client: AMEC Environmental & Infrastructure- \$AMCNProject: AlamedaMatrix: WaterLaboratory ID: 1720267-02File ID: 170725 0945 NO2-084Sampled: 07/24/17 10:23Prepared: 07/25/17 09:45Analyzed: 07/25/17 10:00Solids: 0.00Preparation: No PrepInitial/Final: 20 ml / 20 mlBatch: B[G2225Sequence: 1713243Calibration: UNASSIGNEDInstrument: KONE-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
14797-65-0	Nitrite as N	0.030	0.010	0.030	0.050	1	U	EPA-353.2



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-353.2

26PZ03_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-03 File ID: 170725 0945 NO2-112
Sampled: 07/24/17 12:05 Prepared: 07/25/17 09:45 Analyzed: 07/25/17 10:36
Solids: 0.00 Preparation: No Prep Initial/Final: 20 ml / 20 ml
Batch: B[G2225 Sequence: 1713243 Calibration: UNASSIGNED Instrument: KONE-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
14797-65-0	Nitrite as N	0.030	0.010	0.030	0.050	1	U	EPA-353.2



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**INORGANIC ANALYSIS DATA SHEET
EPA-353.2**

27EW-01_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-04 File ID: 170725 0945 NO2-086
Sampled: 07/24/17 13:45 Prepared: 07/25/17 09:45 Analyzed: 07/25/17 10:00
Solids: 0.00 Preparation: No Prep Initial/Final: 20 ml / 20 ml
Batch: B[G2225 Sequence: 1713243 Calibration: UNASSIGNED Instrument: KONE-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
14797-65-0	Nitrite as N	0.030	0.010	0.030	0.050	1	U	EPA-353.2



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-353.2

27MW06_170724

Laboratory: BC Laboratories

SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Matrix: Water

Laboratory ID: 1720267-08

File ID: 170725 0945 NO2-087

Sampled: 07/24/17 09:00

Prepared: 07/25/17 09:45

Analyzed: 07/25/17 10:00

Solids: 0.00

Preparation: No Prep

Initial/Final: 20 ml / 20 ml

Batch: B[G2225

Sequence: 1713243

Calibration: UNASSIGNED

Instrument: KONE-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
14797-65-0	Nitrite as N	0.030	0.010	0.030	0.050	1	U	EPA-353.2



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
EPA-353.2

27MW07_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-09 File ID: 170725 0945 NO2-091
Sampled: 07/24/17 10:30 Prepared: 07/25/17 09:45 Analyzed: 07/25/17 10:02
Solids: 0.00 Preparation: No Prep Initial/Final: 20 ml / 20 ml
Batch: B[G2225 Sequence: 1713243 Calibration: UNASSIGNED Instrument: KONE-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
14797-65-0	Nitrite as N	0.030	0.010	0.030	0.050	1	U	EPA-353.2



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

**INORGANIC ANALYSIS DATA SHEET
EPA-353.2**

27MW08_170724

Laboratory: BC LaboratoriesSDG: 17-20267Client: AMEC Environmental & Infrastructure- \$AMCNProject: AlamedaMatrix: WaterLaboratory ID: 1720267-10File ID: 170725 0945 NO2-092Sampled: 07/24/17 08:20Prepared: 07/25/17 09:45Analyzed: 07/25/17 10:02Solids: 0.00Preparation: No PrepInitial/Final: 20 ml / 20 mlBatch: B[G2225Sequence: 1713243Calibration: UNASSIGNEDInstrument: KONE-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
14797-65-0	Nitrite as N	0.030	0.010	0.030	0.050	1	U	EPA-353.2



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

**INORGANIC ANALYSIS DATA SHEET
EPA-353.2****27MW09_170724**Laboratory: BC LaboratoriesSDG: 17-20267Client: AMEC Environmental & Infrastructure- \$AMCNProject: AlamedaMatrix: WaterLaboratory ID: 1720267-11File ID: 170725 0945 NO2-093Sampled: 07/24/17 12:55Prepared: 07/25/17 09:45Analyzed: 07/25/17 10:02Solids: 0.00Preparation: No PrepInitial/Final: 20 ml / 20 mlBatch: B[G2225Sequence: 1713243Calibration: UNASSIGNEDInstrument: KONE-1

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
14797-65-0	Nitrite as N	0.030	0.010	0.030	0.050	1	U	EPA-353.2



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

PREPARATION BATCH SUMMARY

EPA-353.2

Laboratory: BC Laboratories SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Batch: B[G2225 Batch Matrix: Water Preparation: No Prep

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
26PZ01_170724	1720267-01	170725 0945 NO2-110	07/25/17 09:45	
26PZ02_170724	1720267-02	170725 0945 NO2-084	07/25/17 09:45	
26PZ03_170724	1720267-03	170725 0945 NO2-112	07/25/17 09:45	
27EW-01_170724	1720267-04	170725 0945 NO2-086	07/25/17 09:45	
27MW06_170724	1720267-08	170725 0945 NO2-087	07/25/17 09:45	
27MW07_170724	1720267-09	170725 0945 NO2-091	07/25/17 09:45	
27MW08_170724	1720267-10	170725 0945 NO2-092	07/25/17 09:45	
27MW09_170724	1720267-11	170725 0945 NO2-093	07/25/17 09:45	
Blank	B[G2225-BLK1	170725 0945 NO2-079	07/25/17 09:45	
LCS	B[G2225-BS1	170725 0945 NO2-078	07/25/17 09:45	
26PZ01_170724	B[G2225-DUP1	170725 0945 NO2-111	07/25/17 09:45	
26PZ01_170724	B[G2225-MS1	170725 0945 NO2-082	07/25/17 09:45	
26PZ01_170724	B[G2225-MSD1	170725 0945 NO2-083	07/25/17 09:45	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

**METHOD BLANK DATA SHEET
EPA-353.2**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: B[G2225-BLK1 File ID: 170725 0945 NO2-079
Prepared: 07/25/17 09:45 Preparation: No Prep Initial/Final: 20 ml / 20 ml
Analyzed: 07/25/17 10:00 Instrument: KONE-1
Batch: B[G2225 Sequence: 1713243 Calibration: UNASSIGNED

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
14797-65-0	Nitrite as N	0.030	0.010	0.030	0.050	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

DUPLICATES**26PZ01_170724****EPA-353.2**Laboratory: BC LaboratoriesSDG: 17-20267Client: AMEC Environmental & Infrastructure- \$AMCNProject: AlamedaMatrix: WaterLaboratory ID: B[G2225-DUP1Batch: B[G2225Lab Source ID: 1720267-01Preparation: No PrepInitial/Final: 20 ml / 20 mlSource Sample Name: 26PZ01_170724

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/L)	C	DUPLICATE CONCENTRATION (mg/L)	C	RPD %	Q	METHOD
Nitrite as N	10	0.0043850		ND				EPA-353.2
Nitrite as NO2	10	0.014403		ND				EPA-353.2

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA-353.2

26PZ01 170724

Laboratory: BC Laboratories SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Matrix: Water

Batch: B[G2225] Laboratory ID: B[G2225-MS1

Preparation: No Prep Initial/Final: 19 ml / 20 ml

Source Sample Number: 1720267-01

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC. #	QC LIMITS REC.
Nitrite as N	0.52632	ND	0.52687	100	90 - 110
Nitrite as NO2	1.7289	ND	1.7305	100	90 - 110

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC. #	% RPD #	QC LIMITS RPD	REC.
Nitrite as N	0.52632	0.53309	101	1.17	10	90 - 110
Nitrite as NO2	1.7289	1.7509	101	1.17	10	90 - 110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

LCS RECOVERY

EPA-353.2

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water
Batch: B[G2225 Laboratory ID: B[G2225-BS1
Preparation: No Prep Initial/Final: 20 ml / 20 ml

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC. #	QC LIMITS REC.
Nitrite as N	0.50000	0.51661	103	90 - 110
Nitrite as NO2	1.6425	1.6968	103	90 - 110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY EPA-353.2

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1713243 Instrument: KONE-1
Matrix: Water Calibration: UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	1713243-CCV1	170725 0945 NO2-048	07/25/17 09:45
Calibration Blank	1713243-CCB1	170725 0945 NO2-049	07/25/17 09:45
Calibration Check	1713243-CCV2	170725 0945 NO2-060	07/25/17 09:50
Calibration Blank	1713243-CCB2	170725 0945 NO2-061	07/25/17 09:50
Calibration Check	1713243-CCV3	170725 0945 NO2-072	07/25/17 09:52
Calibration Blank	1713243-CCB3	170725 0945 NO2-073	07/25/17 09:52
Calibration Check	1713243-CCV4	170725 0945 NO2-076	07/25/17 09:54
Calibration Blank	1713243-CCB4	170725 0945 NO2-077	07/25/17 09:54
LCS	B[G2225-BS1]	170725 0945 NO2-078	07/25/17 10:00
Blank	B[G2225-BLK1]	170725 0945 NO2-079	07/25/17 10:00
26PZ01_170724	B[G2225-MS1]	170725 0945 NO2-082	07/25/17 10:00
26PZ01_170724	B[G2225-MSD1]	170725 0945 NO2-083	07/25/17 10:00
26PZ02_170724	1720267-02	170725 0945 NO2-084	07/25/17 10:00
27EW-01_170724	1720267-04	170725 0945 NO2-086	07/25/17 10:00
27MW06_170724	1720267-08	170725 0945 NO2-087	07/25/17 10:00
Calibration Check	1713243-CCV5	170725 0945 NO2-088	07/25/17 10:00
Calibration Blank	1713243-CCB5	170725 0945 NO2-089	07/25/17 10:00
27MW07_170724	1720267-09	170725 0945 NO2-091	07/25/17 10:02
27MW08_170724	1720267-10	170725 0945 NO2-092	07/25/17 10:02
27MW09_170724	1720267-11	170725 0945 NO2-093	07/25/17 10:02
Calibration Check	1713243-CCV6	170725 0945 NO2-094	07/25/17 10:04
Calibration Blank	1713243-CCB6	170725 0945 NO2-095	07/25/17 10:04
Calibration Check	1713243-CCV7	170725 0945 NO2-102	07/25/17 10:10
Calibration Blank	1713243-CCB7	170725 0945 NO2-103	07/25/17 10:10
Calibration Check	1713243-CCV8	170725 0945 NO2-104	07/25/17 10:32
Calibration Blank	1713243-CCB8	170725 0945 NO2-105	07/25/17 10:32



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY EPA-353.2

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1713243 Instrument: KONE-1
Matrix: Water Calibration: UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	1713243-CCV9	170725 0945 NO2-108	07/25/17 10:33
Calibration Blank	1713243-CCB9	170725 0945 NO2-109	07/25/17 10:33
26PZ01_170724	1720267-01	170725 0945 NO2-110	07/25/17 10:34
26PZ01_170724	B[G2225-DUP1	170725 0945 NO2-111	07/25/17 10:36
26PZ03_170724	1720267-03	170725 0945 NO2-112	07/25/17 10:36
Calibration Check	1713243-CCVA	170725 0945 NO2-113	07/25/17 10:38
Calibration Blank	1713243-CCBA	170725 0945 NO2-114	07/25/17 10:38
Calibration Check	1713243-CCVB	170725 0945 NO2-115	07/25/17 10:48
Calibration Blank	1713243-CCBB	170725 0945 NO2-116	07/25/17 10:48
Calibration Check	1713243-CCVC	170725 0945 NO2-118	07/25/17 10:50
Calibration Blank	1713243-CCBC	170725 0945 NO2-119	07/25/17 10:50
Calibration Check	1713243-CCVD	170725 0945 NO2-216	07/25/17 15:02
Calibration Blank	1713243-CCBD	170725 0945 NO2-217	07/25/17 15:02
Calibration Check	1713243-CCVE	170725 0945 NO2-220	07/25/17 15:04
Calibration Blank	1713243-CCBE	170725 0945 NO2-221	07/25/17 15:04



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

BLANKS
EPA-353.2Laboratory: BC LaboratoriesSDG: 17-20267Client: AMEC Environmental & Infrastructure- \$AMCNInstrument ID: KONE-1Project: AlamedaSequence: 1713243Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	DL	LOD	LOQ	Units	C	Method
1713243-CCB1	Nitrite as N	0.0032180	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.010570	0.040		0.17	mg/L	U	EPA-353.2
1713243-CCB2	Nitrite as N	0.0039760	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.013059	0.040		0.17	mg/L	U	EPA-353.2
1713243-CCB3	Nitrite as N	0.0075100	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.024667	0.040		0.17	mg/L	U	EPA-353.2
1713243-CCB4	Nitrite as N	0.0041900	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.013762	0.040		0.17	mg/L	U	EPA-353.2
1713243-CCB5	Nitrite as N	0.0049850	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.016373	0.040		0.17	mg/L	U	EPA-353.2
1713243-CCB6	Nitrite as N	0.0039460	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.012961	0.040		0.17	mg/L	U	EPA-353.2
1713243-CCB7	Nitrite as N	0.0050140	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.016468	0.040		0.17	mg/L	U	EPA-353.2
1713243-CCB8	Nitrite as N	0.0038740	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.012724	0.040		0.17	mg/L	U	EPA-353.2
1713243-CCB9	Nitrite as N	0.0033010	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.010842	0.040		0.17	mg/L	U	EPA-353.2
1713243-CCBA	Nitrite as N	0.0030920	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.010156	0.040		0.17	mg/L	U	EPA-353.2
1713243-CCBB	Nitrite as N	0.0031440	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.010326	0.040		0.17	mg/L	U	EPA-353.2
1713243-CCBC	Nitrite as N	0.0027160	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.0089207	0.040		0.17	mg/L	U	EPA-353.2
1713243-CCBD	Nitrite as N	0.0037580	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.012343	0.040		0.17	mg/L	U	EPA-353.2
1713243-CCBE	Nitrite as N	0.0036870	0.010		0.050	mg/L	U	EPA-353.2
	Nitrite as NO2	0.012110	0.040		0.17	mg/L	U	EPA-353.2



AMEC Environmental & Infrastructure-
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Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL AND CONTINUING CALIBRATION CHECK

EPA-353.2

Laboratory: BC Laboratories

SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Instrument ID: KONE-1

Calibration: UNASSIGNED

Control Limt: +/- 10.00%

Sequence: 1713243

Lab Sample ID	Analyte	True	Found	%R	Units	Method
1713243-CCV1	Nitrite as N	0.50000	0.50527	101	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6596	101	mg/L	EPA-353.2
1713243-CCV2	Nitrite as N	0.50000	0.50812	102	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6689	102	mg/L	EPA-353.2
1713243-CCV3	Nitrite as N	0.50000	0.50590	101	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6616	101	mg/L	EPA-353.2
1713243-CCV4	Nitrite as N	0.50000	0.50771	102	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6676	102	mg/L	EPA-353.2
1713243-CCV5	Nitrite as N	0.50000	0.53276	107	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.7499	107	mg/L	EPA-353.2
1713243-CCV6	Nitrite as N	0.50000	0.50952	102	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6735	102	mg/L	EPA-353.2
1713243-CCV7	Nitrite as N	0.50000	0.50691	101	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6650	101	mg/L	EPA-353.2
1713243-CCV8	Nitrite as N	0.50000	0.51016	102	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6756	102	mg/L	EPA-353.2
1713243-CCV9	Nitrite as N	0.50000	0.51479	103	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6908	103	mg/L	EPA-353.2
1713243-CCVA	Nitrite as N	0.50000	0.50861	102	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6705	102	mg/L	EPA-353.2
1713243-CCVB	Nitrite as N	0.50000	0.51142	102	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6798	102	mg/L	EPA-353.2
1713243-CCVC	Nitrite as N	0.50000	0.51156	102	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.6802	102	mg/L	EPA-353.2
1713243-CCVD	Nitrite as N	0.50000	0.51979	104	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.7073	104	mg/L	EPA-353.2
1713243-CCVE	Nitrite as N	0.50000	0.51964	104	mg/L	EPA-353.2
	Nitrite as NO2	1.6425	1.7068	104	mg/L	EPA-353.2

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

HOLDING TIME SUMMARY**EPA-353.2**Laboratory: BC Laboratories SDG: 17-20267Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
26PZ01_170724	07/24/17 11:16	07/24/17 21:40	07/25/17 09:45	0.97	2.00	07/25/17 10:34	0.97	2.00	
26PZ02_170724	07/24/17 10:23	07/24/17 21:40	07/25/17 09:45	0.98	2.00	07/25/17 10:00	0.98	2.00	
26PZ03_170724	07/24/17 12:05	07/24/17 21:40	07/25/17 09:45	0.94	2.00	07/25/17 10:36	0.94	2.00	
27EW-01_170724	07/24/17 13:45	07/24/17 21:40	07/25/17 09:45	0.84	2.00	07/25/17 10:00	0.84	2.00	
27MW06_170724	07/24/17 09:00	07/24/17 21:40	07/25/17 09:45	1.04	2.00	07/25/17 10:00	1.04	2.00	
27MW07_170724	07/24/17 10:30	07/24/17 21:40	07/25/17 09:45	0.98	2.00	07/25/17 10:02	0.98	2.00	
27MW08_170724	07/24/17 08:20	07/24/17 21:40	07/25/17 09:45	1.07	2.00	07/25/17 10:02	1.07	2.00	
27MW09_170724	07/24/17 12:55	07/24/17 21:40	07/25/17 09:45	0.88	2.00	07/25/17 10:02	0.88	2.00	

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data From Instrument KONE-1



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Analytical Runs

Laboratory
Analyzer User

26.07.2017 07:15

Test: NO2

Sample Id	Result	Dil.	1 +	Response	Errors
CCV-NO2	0.50527	0.0		0.265	
CCB-NO2	0.00322	0.0		0.006	
B1N-BS1	0.50459	0.0		0.264	
B1N-BLK1	0.00508	0.0		0.007	
1720172-01	0.00525	0.0		0.007	
B1N-DUP1	0.00507	0.0		0.007	
B1N-MS1	0.51023	0.0		0.267	
B1N-MSD1	0.51489	0.0		0.270	
1720172-02	0.00576	0.0		0.008	
1720195-01	0.00425	0.0		0.007	
1720196-01	0.00526	0.0		0.007	
1720220-01	0.09289	0.0		0.052	
CCV-NO2	0.50812	0.0		0.266	
CCB-NO2	0.00398	0.0		0.007	
1720228-01	-0.16775	0.0		-0.082	
B2N-BS1	0.49488	0.0		0.259	
B2N-BLK1	0.00543	0.0		0.007	
1720266-01	0.02580	0.0		0.018	
B2N-DUP1	0.02445	0.0		0.017	
B2N-MS1	0.50854	0.0		0.266	
B2N-MSD1	0.50950	0.0		0.267	
1720266-02	0.02674	0.0		0.018	
1720266-03	0.05788	0.0		0.034	
1720266-04	0.02392	0.0		0.017	
CCV-NO2	0.50590	0.0		0.265	
CCB-NO2	0.00751	0.0		0.008	
1720266-05	0.01599	0.0		0.013	
1720265-01	0.13067	0.0		0.072	
CCV-NO2	0.50771	0.0		0.266	
CCB-NO2	0.00419	0.0		0.007	
B3N-BS1	0.51661	0.0		0.271	
B3N-BLK1	0.00420	0.0		0.007	
1720267-01	-0.00446	0.0		0.002	
B3N-DUP1	-0.00590	0.0		0.002	
B3N-MS1	0.50052	0.0		0.262	
B3N-MSD1	0.50643	0.0		0.265	
1720267-02	0.00234	0.0		0.006	
1720267-03	-0.01511	0.0		-0.003	
1720267-04	0.00711	0.0		0.008	
1720267-08	0.00608	0.0		0.008	
CCV-NO2	0.53276	0.0		0.279	
CCB-NO2	0.00499	0.0		0.007	
1720220-01	0.09212	0.0		0.052	
1720220-01	0.09334	0.0		0.053	
1720267-09	0.00498	0.0		0.007	
1720267-10	0.00908	0.0		0.009	
1720267-11	0.00410	0.0		0.007	
CCV-NO2	0.50952	0.0		0.267	
CCB-NO2	0.00395	0.0		0.007	
1720266-01	0.02321	0.0		0.017	
B2N-DUP1	0.02322	0.0		0.017	
B2N-MS1	0.51164	0.0		0.268	
B2N-MSD1	0.51170	0.0		0.268	
1720266-03	0.05427	0.0		0.033	
1720266-03	0.05309	0.0		0.032	
1720265-01	0.13261	0.0		0.073	
1720265-01	0.13367	0.0		0.073	
CCV-NO2	0.50691	0.0		0.266	

Laboratory
Analyzer User

26.07.2017 07:15

Test: NO2

Sample Id	Result	Dil.	1 +	Response	Errors
CCB-NO2	0.00501	0.0		0.007	
CCV-NO2	0.51016	0.0		0.267	
CCB-NO2	0.00387	0.0		0.007	
1720228-01	-0.08258	0.0		-0.038	
1720228-01	-0.08572	0.0		-0.040	
1720177-01	0.00436	0.0		0.007	
1720177-01	0.00432	0.0		0.007	
CCV-NO2	0.51479	0.0		0.270	
CCB-NO2	0.00330	0.0		0.006	
1720267-01	0.00439	0.0		0.007	
B3N-DUP1	0.00370	0.0		0.007	
1720267-03	0.00532	0.0		0.007	
1720267-03	0.00537	0.0		0.007	
CCV-NO2	0.50861	0.0		0.266	
CCB-NO2	0.00309	0.0		0.006	
CCV-NO2	0.51142	0.0		0.268	
CCB-NO2	0.00314	0.0		0.006	
1720228-01	-0.00129	0.0		0.004	
1720228-01	-0.00130	0.0		0.004	
CCV-NO2	0.51156	0.0		0.268	
CCB-NO2	0.00272	0.0		0.006	
CCV-NO2	0.51979	0.0		0.272	
CCB-NO2	0.00376	0.0		0.007	
1720276-01	0.00309	0.0		0.006	
1720276-02	0.00364	0.0		0.006	
CCV-NO2	0.51964	0.0		0.272	
CCB-NO2	0.00369	0.0		0.007	

N	57
Mean	0.11118
SD	0.201360
CV%	181.10

Laboratory
Analyzer User

Date : 26.07.2017

Time : 07:18

Test : NO2
Unit : mg/l

Sample	Result	Date and Time	Note	Dilut
CCV-NO2	0.50527	25.07.2017 09:45		
CCB-NO2	0.00322	25.07.2017 09:45		
B1N-BS1	0.50459	25.07.2017 09:45		
B1N-BLK1	0.00508	25.07.2017 09:45		
1720172-01	0.00525	25.07.2017 09:45		
B1N-DUP1	0.00507	25.07.2017 09:45		
B1N-MS1	0.51023	25.07.2017 09:45		
B1N-MSD1	0.51489	25.07.2017 09:45		
1720172-02	0.00576	25.07.2017 09:45		
1720195-01	0.00425	25.07.2017 09:45		
1720196-01	0.00526	25.07.2017 09:45		
1720220-01	0.09289	25.07.2017 09:45		
CCV-NO2	0.50812	25.07.2017 09:50		
CCB-NO2	0.00398	25.07.2017 09:50		
1720228-01	-0.16775	25.07.2017 09:50		
B2N-BS1	0.49488	25.07.2017 09:50		
B2N-BLK1	0.00543	25.07.2017 09:50		
1720266-01	0.02580	25.07.2017 09:50		
B2N-DUP1	0.02445	25.07.2017 09:50		
B2N-MS1	0.50854	25.07.2017 09:50		
B2N-MSD1	0.50950	25.07.2017 09:50		
1720266-02	0.02674	25.07.2017 09:50		
1720266-03	0.05788	25.07.2017 09:50		
1720266-04	0.02392	25.07.2017 09:50		
CCV-NO2	0.50590	25.07.2017 09:52		
CCB-NO2	0.00751	25.07.2017 09:52		
1720266-05	0.01599	25.07.2017 09:52		
1720265-01	0.13067	25.07.2017 09:52		
CCV-NO2	0.50771	25.07.2017 09:54		
CCB-NO2	0.00419	25.07.2017 09:54		
B3N-BS1	0.51661	25.07.2017 10:00		
B3N-BLK1	0.00420	25.07.2017 10:00		
1720267-01	-0.00446	25.07.2017 10:00		
B3N-DUP1	-0.00590	25.07.2017 10:00		
B3N-MS1	0.50052	25.07.2017 10:00		
B3N-MSD1	0.50643	25.07.2017 10:00		
1720267-02	0.00234	25.07.2017 10:00		
1720267-03	-0.01511	25.07.2017 10:00		
1720267-04	0.00711	25.07.2017 10:00		
1720267-08	0.00608	25.07.2017 10:00		
CCV-NO2	0.53276	25.07.2017 10:00		
CCB-NO2	0.00499	25.07.2017 10:00		
1720220-01	0.09212	25.07.2017 10:02		
1720220-01	0.09334	25.07.2017 10:02		
1720267-09	0.00498	25.07.2017 10:02		
1720267-10	0.00908	25.07.2017 10:02		
1720267-11	0.00410	25.07.2017 10:02		
CCV-NO2	0.50952	25.07.2017 10:04		
CCB-NO2	0.00395	25.07.2017 10:04		
1720266-01	0.02321	25.07.2017 10:08		
B2N-DUP1	0.02322	25.07.2017 10:08		
B2N-MS1	0.51164	25.07.2017 10:08		
B2N-MSD1	0.51170	25.07.2017 10:08		
1720266-03	0.05427	25.07.2017 10:08		
1720266-03	0.05309	25.07.2017 10:08		
1720265-01	0.13261	25.07.2017 10:08		

Laboratory
Analyzer User

Date : 25.07.2017

Time : 15:30

Test : NO2
Unit : mg/l

Sample	Result	Date and Time	Note	Dilut
1720265-01	0.13367	25.07.2017 10:08		
CCV-NO2	0.50691	25.07.2017 10:10		
CCB-NO2	0.00501	25.07.2017 10:10		
CCV-NO2	0.51016	25.07.2017 10:32		
CCB-NO2	0.00387	25.07.2017 10:32		
1720228-01	-0.08258	25.07.2017 10:32		
1720228-01	-0.08572	25.07.2017 10:32		
1720177-01	0.00436	25.07.2017 10:32		
1720177-01	0.00432	25.07.2017 10:32		
CCV-NO2	0.51479	25.07.2017 10:33		
CCB-NO2	0.00330	25.07.2017 10:33		
1720267-01	0.00439	25.07.2017 10:34		
B3N-DUP1	0.00370	25.07.2017 10:36		
1720267-03	0.00532	25.07.2017 10:36		
1720267-03	0.00537	25.07.2017 10:36		
CCV-NO2	0.50861	25.07.2017 10:38		
CCB-NO2	0.00309	25.07.2017 10:38		
CCV-NO2	0.51142	25.07.2017 10:48		
CCB-NO2	0.00314	25.07.2017 10:48		
1720228-01	-0.00129	25.07.2017 10:48		
1720228-01	-0.00130	25.07.2017 10:48		
CCV-NO2	0.51156	25.07.2017 10:50		
CCB-NO2	0.00272	25.07.2017 10:50		
CCV-NO2	0.51979	25.07.2017 15:02		
CCB-NO2	0.00376	25.07.2017 15:02		
1720276-01	0.00309	25.07.2017 15:02		
1720276-02	0.00364	25.07.2017 15:02		
CCV-NO2	0.51964	25.07.2017 15:04		
CCB-NO2	0.00369	25.07.2017 15:04		



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Calibration Summary

Laboratory
Analyzer User

24.07.2017 10:59

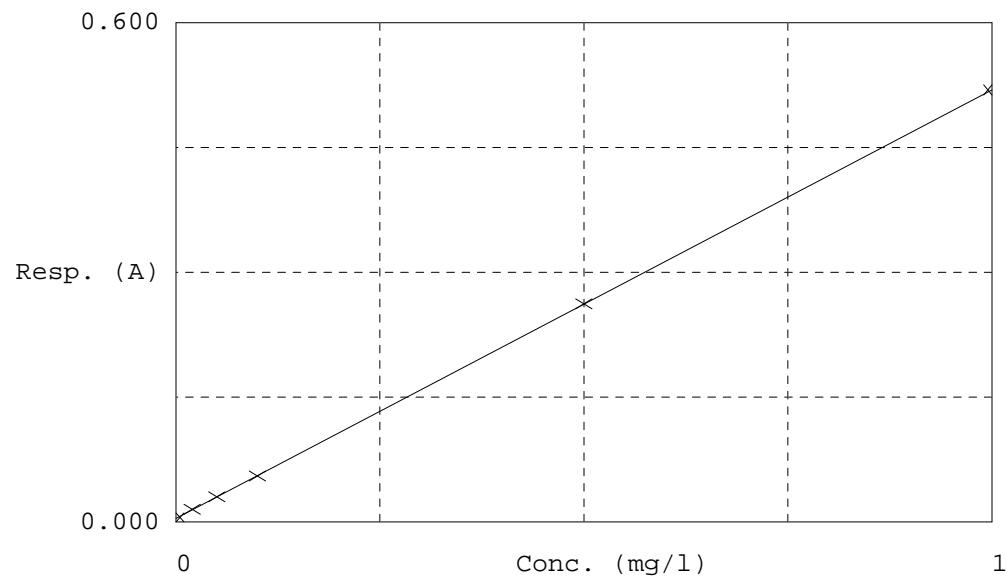
Test NO2

Accepted 24.07.2017 10:59

Factor 1.94242
Bias 0.00461

Coeff. of det. 0.999996

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	NO2-0	0.00483	0.00043	0.00000	
2	NO2-0.02	0.01534	0.02083	0.02000	
3	NO2-0.05	0.03026	0.04982	0.05000	
4	NO2-0.10	0.05539	0.09863	0.10000	
5	NO2-0.50	0.26220	0.50035	0.50000	
6	NO2-1.00	0.51941	0.99996	1.00000	
7	ICB-NO2(control)	0.00562	0.00196	0.00000	
8	ICV-NO2(control)	0.26423	0.50428	0.50000	

NO2 Laboratory
 Analyzer User

Date : 24.07.2017
Time : 10:59

Last change date 04.02.2016 12:17

Tick length (sec) 7.0

Full name	Nitrite as N	Test In Use	YES
Online Name		LOW	HIGH
Test type	Photometric	Test limit	* 5.00000 mg/l
Result unit	mg/l	Initial absorbance	-0.050 * A
Number of Decim.	5	Dilution limit	* 1.000000 mg/l
		Secondary dil 1+	0.0 4.0
		Critical limit	* * mg/l
		Reflex test limit	* * mg/l
		Reflex test	

Acceptance	Manual	Reference class	LOW	HIGH	In Use
Dilution 1+	0.0				

Sample type	Water	Correction factor	1.00		
	Raw water	Correction bias	0.00	mg/l	
	Sewage				

Calibration type	Linear				
Curve direction	Ascending				
Repeat time (d)	0	Abs error (mA)		*	
Points/cal.	Single	Rel error (%)		*	
Acceptance	Manual				
Response limit (mA)	MIN	MAX			
	*	*			

Bias correction in use NO

Cd reduction NO

Type of Calibrators	Separate				
Calibrator	Conc.	Dil. ratio			
NO2-0	0.000	1+0.0			
NO2-0.02	0.020	1+0.0			
NO2-0.05	0.050	1+0.0			
NO2-0.10	0.100	1+0.0			
NO2-0.50	0.500	1+0.0			
NO2-1.00	1.000	1+0.0			

Manual QC in Use	YES	Routine QC in Use	YES		
Acceptance	Manual	Interval Requests	10		
		Additional condition	NO		

Control	Mean	SD	Control	Mean	SD
ICB-NO2	0.00	0.01	CCB-NO2	0.00	0.01
ICV-NO2	0.50	0.05	CCV-NO2	0.50	0.05

Rules in Use 1:1.0*SD Rules in Use 1:1.0*SD

Blank	YES	Normal cuvette			
-------	-----	----------------	--	--	--

Sample		Volume (ul)	32		
Disp. with	Extra	Add. Volume (ul)	30		
Dilution with	Water	Wash reagent	None		

=====
Test definition Aquakem 7.2A01 Page: 2

NO₂ Laboratory Analyzer User

Date : 24.07.2017
Time : 10:59

Reagent	NO2 Buffer	Volume (ul)	120
Disp. with	Extra	Add. Volume (ul)	30
Wash reagent	None		
Syringe speed	Normal		
Measurement	End point	Blank	
Resp. Min(A)	*	Resp. Max(A)	*
Reagent	NO2 color	Volume (ul)	32
Disp. with	Extra	Add. Volume (ul)	30
Wash reagent	None		
Syringe speed	Normal		
Incubation		Time (sec)	360
Measurement	End point		
Wavelength (nm)	540 nm	Side wavel. (nm)	None
Meas. type	Fixed timing		



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Batch Information



PREPARATION BENCH SHEET

B[G2225]

BC Laboratories

Printed: 8/24/2017 10:33:44AM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720267-01 D	i353.2wm NO2 as N	7/25/2017 9:45AM	RCC	20	20					
1720267-02 D	i353.2wm NO2 as N	7/25/2017 9:45AM	RCC	20	20					
1720267-03 D	i353.2wm NO2 as N	7/25/2017 9:45AM	RCC	20	20					
1720267-04 G	i353.2wm NO2 as N	7/25/2017 9:45AM	RCC	20	20					
1720267-08 G	i353.2wm NO2 as N	7/25/2017 9:45AM	RCC	20	20					
1720267-09 G	i353.2wm NO2 as N	7/25/2017 9:45AM	RCC	20	20					
1720267-10 G	i353.2wm NO2 as N	7/25/2017 9:45AM	RCC	20	20					
1720267-11 G	i353.2wm NO2 as N	7/25/2017 9:45AM	RCC	20	20					
1720276-01 A	i353.2wm NO2 as N	7/25/2017 3:02PM	RCC	20	20					
1720276-02 A	i353.2wm NO2 as N	7/25/2017 3:02PM	RCC	20	20					
B[G2225-BLK1]	QC	7/25/2017 9:45AM	RCC	20	20					
B[G2225-BS1]	QC	7/25/2017 9:45AM	RCC	20	20	7F23021		1000		
B[G2225-DUP1]	QC	7/25/2017 9:45AM	RCC	20	20		1720267-01			
B[G2225-MS1]	QC	7/25/2017 9:45AM	RCC	19	20	7F23021	1720267-01	1000		
B[G2225-MSD1]	QC	7/25/2017 9:45AM	RCC	19	20	7F23021	1720267-01	1000		

Spike Mixes	Description	Solvent	Prepared	Expires
7F23021	PO4/NO2 SPIKE	DI WATER	6/23/2017 by Roxanne Cantorn	12/23/2017



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Sequence Information



ANALYSIS SEQUENCE

1713243

Instrument: KONE-1

Calibration ID:

Sequence Date: 07/25/2017

Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713243-CCV1	QC		1		7G25034		
1713243-CCB1	QC		2				
B[G2223-BS1]	QC		3				
B[G2223-BLK1]	QC		4				
1720172-01	i353.2wb NO2 as NO2	A	5				BatchQC
1720172-01	i353.2wm NO2 as N	A	5				
B[G2223-DUP1]	QC		6				
B[G2223-MS1]	QC		7				
B[G2223-MSD1]	QC		8				
1720172-02	i353.2wm NO2 as N	A	9				
1720195-01	i353.2wm NO2 as N	G	10				
1720196-01	i353.2wm NO2 as N	A	11				
1720220-01	i353.2wm NO2 as N	A	12				
1713243-CCV2	QC		13		7G25034		
1713243-CCB2	QC		14				
B[G2224-BS1]	QC		15				
B[G2224-BLK1]	QC		16				
1720266-01	i353.2wm NO2 as N	A	17				
B[G2224-DUP1]	QC		18				
B[G2224-MS1]	QC		19				
B[G2224-MSD1]	QC		20				
1720266-02	i353.2wm NO2 as N	A	21				
1720266-03	i353.2wm NO2 as N	A	22				
1720266-04	i353.2wm NO2 as N	A	23				
1713243-CCV3	QC		24		7G25034		
1713243-CCB3	QC		25				
1720266-05	i353.2wm NO2 as N	A	26				
1720265-01	i353.2wm NO2 as N	A	27				
1713243-CCV4	QC		28		7G25034		
1713243-CCB4	QC		29				
B[G2225-BS1]	QC		30				
B[G2225-BLK1]	QC		31				
B[G2225-MS1]	QC		32				
B[G2225-MSD1]	QC		33				
1720267-02	i353.2wm NO2 as N	D	34				
1720267-04	i353.2wm NO2 as N	G	35				
1720267-08	i353.2wm NO2 as N	G	36				
1713243-CCV5	QC		37		7G25034		
1713243-CCB5	QC		38				



ANALYSIS SEQUENCE

1713243

Instrument: KONE-1

Calibration ID:

Sequence Date: 07/25/2017

Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720267-09	i353.2wm NO2 as N	G	39				
1720267-10	i353.2wm NO2 as N	G	40				
1720267-11	i353.2wm NO2 as N	G	41				
1713243-CCV6	QC		42		7G25034		
1713243-CCB6	QC		43				
1713243-CCV7	QC		44		7G25034		
1713243-CCB7	QC		45				
1713243-CCV8	QC		46		7G25034		
1713243-CCB8	QC		47				
1720177-01	i353.2wm NO2 as N	G	48				
1713243-CCV9	QC		49		7G25034		
1713243-CCB9	QC		50				
1720267-01	i353.2wm NO2 as N	D	51				
B[G2225-DUP1	QC		52				
1720267-03	i353.2wm NO2 as N	D	53				
1713243-CCVA	QC		54		7G25034		
1713243-CCBA	QC		55				
1713243-CCVB	QC		56		7G25034		
1713243-CCBB	QC		57				
1720228-01	i353.2wb NO2 as NO2	I	58				
1713243-CCVC	QC		59		7G25034		
1713243-CCBC	QC		60				
1713243-CCVD	QC		61		7G25034		
1713243-CCBD	QC		62				
1720276-01	i353.2wm NO2 as N	A	63				
1720276-02	i353.2wm NO2 as N	A	64				
1713243-CCVE	QC		65		7G25034		
1713243-CCBE	QC		66				



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911

SDG: 17-20267

Class: WET

Method: EPA-415.1



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSES DATA PACKAGE COVER PAGE**EPA-415.1**

Laboratory: BC Laboratories

SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Client Sample Id:

27EW-01_170724
27MW06_170724
27MW07_170724
27MW08_170724
27MW09_170724

Lab Sample Id:

1720267-04
1720267-08
1720267-09
1720267-10
1720267-11

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature:

Name: Sara Guron

Date:

08-24-2017Title: QA/QC Manager



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS**EPA-415.1****Laboratory:** BC Laboratories**SDG:** 17-20267**Client:** AMEC Environmental & Infrastructure- \$AMCN**Project:** Alameda**Matrix:** Water**Instrument:** TOC2

Analyte	DL	LOD	LOQ	Units
Non-Volatile Organic Carbon	0.3	0.3	1	mg/L



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**INORGANIC ANALYSIS DATA SHEET
EPA-415.1**

27EW-01_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-04 File ID: 20170728_0800-029
Sampled: 07/24/17 13:45 Prepared: 07/28/17 06:50 Analyzed: 07/28/17 15:14
Solids: 0.00 Preparation: General Preparation Initial/Final: 100 ml / 100 ml
Batch: B[G2146 Sequence: 1713540 Calibration: UNASSIGNED Instrument: TOC2

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Non-Volatile Organic Carbon	7.2	0.30	0.30	1.0	1		EPA-415.1



AMEC Environmental & Infrastructure-
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INORGANIC ANALYSIS DATA SHEET
EPA-415.1

27MW06_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-08 File ID: 20170728_0800-022
Sampled: 07/24/17 09:00 Prepared: 07/28/17 06:50 Analyzed: 07/28/17 13:33
Solids: 0.00 Preparation: General Preparation Initial/Final: 100 ml / 100 ml
Batch: B[G2146 Sequence: 1713540 Calibration: UNASSIGNED Instrument: TOC2

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Non-Volatile Organic Carbon	1.5	0.30	0.30	1.0	1		EPA-415.1



AMEC Environmental & Infrastructure-
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Reported: 8/24/2017 10:33:44AM
Project: Alameda
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Project Manager: Kevin Olness

**INORGANIC ANALYSIS DATA SHEET
EPA-415.1****27MW07_170724**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-09 File ID: 20170728_0800-030
Sampled: 07/24/17 10:30 Prepared: 07/28/17 06:50 Analyzed: 07/28/17 15:28
Solids: 0.00 Preparation: General Preparation Initial/Final: 100 ml / 100 ml
Batch: B[G2146 Sequence: 1713540 Calibration: UNASSIGNED Instrument: TOC2

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Non-Volatile Organic Carbon	2.0	0.30	0.30	1.0	1		EPA-415.1



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**INORGANIC ANALYSIS DATA SHEET
EPA-415.1****27MW08_170724**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-10 File ID: 20170728_0800-031
Sampled: 07/24/17 08:20 Prepared: 07/28/17 06:50 Analyzed: 07/28/17 15:42
Solids: 0.00 Preparation: General Preparation Initial/Final: 100 ml / 100 ml
Batch: B[G2146 Sequence: 1713540 Calibration: UNASSIGNED Instrument: TOC2

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Non-Volatile Organic Carbon	1.6	0.30	0.30	1.0	1		EPA-415.1



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Reported: 8/24/2017 10:33:44AM
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Project Manager: Kevin Olness

**INORGANIC ANALYSIS DATA SHEET
EPA-415.1****27MW09_170724**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-11 File ID: 20170728_0800-032
Sampled: 07/24/17 12:55 Prepared: 07/28/17 06:50 Analyzed: 07/28/17 15:57
Solids: 0.00 Preparation: General Preparation Initial/Final: 100 ml / 100 ml
Batch: B[G2146 Sequence: 1713540 Calibration: UNASSIGNED Instrument: TOC2

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
---	Non-Volatile Organic Carbon	1.2	0.30	0.30	1.0	1		EPA-415.1



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PREPARATION BATCH SUMMARY**EPA-415.1**

Laboratory: BC Laboratories SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Batch: B[G2146 Batch Matrix: Water Preparation: General Preparation

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
27EW-01_170724	1720267-04	20170728_0800-029	07/28/17 06:50	
27MW06_170724	1720267-08	20170728_0800-022	07/28/17 06:50	
27MW07_170724	1720267-09	20170728_0800-030	07/28/17 06:50	
27MW08_170724	1720267-10	20170728_0800-031	07/28/17 06:50	
27MW09_170724	1720267-11	20170728_0800-032	07/28/17 06:50	
Blank	B[G2146-BLK1	20170728_0800-020	07/28/17 06:50	
LCS	B[G2146-BS1	20170728_0800-021	07/28/17 06:50	
27MW06_170724	B[G2146-DUP1	20170728_0800-026	07/28/17 06:50	
27MW06_170724	B[G2146-MS1	20170728_0800-027	07/28/17 06:50	
27MW06_170724	B[G2146-MSD1	20170728_0800-028	07/28/17 06:50	



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METHOD BLANK DATA SHEET EPA-415.1

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: B[G2146-BLK1 File ID: 20170728_0800-020
Prepared: 07/28/17 06:50 Preparation: General Preparation Initial/Final: 100 ml / 100 ml
Analyzed: 07/28/17 13:04 Instrument: TOC2
Batch: B[G2146 Sequence: 1713540 Calibration: UNASSIGNED

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
---	Non-Volatile Organic Carbon	0.30	0.30	0.30	1.0	U



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DUPLICATES

EPA-415.1

27MW06 170724

Laboratory: BC Laboratories

SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Matrix: Water

Laboratory ID: B[G2146-DUP1

Batch: B[G2146

Lab Source ID: 1720267-08

Preparation: General Preparation

Initial/Final: 100 ml / 100 ml

Source Sample Name: 27MW06_170724

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/L)	C	DUPLICATE CONCENTRATION (mg/L)	C	RPD %	Q	METHOD
Non-Volatile Organic Carbon	10	1.4600		1.5120		3.50		EPA-415.1

* Values outside of QC limits



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MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY
EPA-415.1

27MW06 170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water
Batch: B[G2146 Laboratory ID: B[G2146-MS1
Preparation: General Preparation Initial/Final: 99.5 ml / 100 ml
Source Sample Number: 1720267-08

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC. #	QC LIMITS REC.
Non-Volatile Organic Carbon	5.0251	1.4600	6.9930	110	80 - 120

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC. #	% RPD #	QC LIMITS RPD	REC.
Non-Volatile Organic Carbon	5.0251	6.9397	109	0.765	10	80 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



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LCS RECOVERY

EPA-415.1

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water
Batch: B[G2146 Laboratory ID: B[G2146-BS1
Preparation: General Preparation Initial/Final: 100 ml / 100 ml

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC. #	QC LIMITS REC.
Non-Volatile Organic Carbon	5.0000	5.4990	110	85 - 115

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



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Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY EPA-415.1

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1713540 Instrument: TOC2
Matrix: Water Calibration: UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	1713540-ICV1	20170728_0800-003	07/28/17 09:01
Initial Cal Blank	1713540-ICB1	20170728_0800-004	07/28/17 09:15
MRL Check	1713540-CRL1	20170728_0800-005	07/28/17 09:30
Calibration Check	1713540-CCV1	20170728_0800-015	07/28/17 11:53
Calibration Blank	1713540-CCB1	20170728_0800-016	07/28/17 12:07
Blank	B[G2146-BLK1	20170728_0800-020	07/28/17 13:04
LCS	B[G2146-BS1	20170728_0800-021	07/28/17 13:19
27MW06_170724	1720267-08	20170728_0800-022	07/28/17 13:33
Calibration Check	1713540-CCV2	20170728_0800-023	07/28/17 13:47
Calibration Blank	1713540-CCB2	20170728_0800-024	07/28/17 14:02
27MW06_170724	B[G2146-DUP1	20170728_0800-026	07/28/17 14:30
27MW06_170724	B[G2146-MS1	20170728_0800-027	07/28/17 14:45
27MW06_170724	B[G2146-MSD1	20170728_0800-028	07/28/17 14:59
27EW-01_170724	1720267-04	20170728_0800-029	07/28/17 15:14
27MW07_170724	1720267-09	20170728_0800-030	07/28/17 15:28
27MW08_170724	1720267-10	20170728_0800-031	07/28/17 15:42
27MW09_170724	1720267-11	20170728_0800-032	07/28/17 15:57
Calibration Check	1713540-CCV3	20170728_0800-035	07/28/17 16:40
Calibration Blank	1713540-CCB3	20170728_0800-036	07/28/17 16:54
Calibration Check	1713540-CCV4	20170728_0800-046	07/28/17 19:18
Calibration Blank	1713540-CCB4	20170728_0800-047	07/28/17 19:32
Calibration Check	1713540-CCV9	20170731_0905-001	07/31/17 09:11
Calibration Blank	1713540-CCB9	20170731_0905-002	07/31/17 09:25
Calibration Check	1713540-CCVA	20170731_0905-008	07/31/17 10:51
Calibration Blank	1713540-CCBA	20170731_0905-009	07/31/17 11:04
Calibration Check	1713540-CCVB	20170731_0905-018	07/31/17 13:13



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ANALYSIS BATCH (SEQUENCE) SUMMARY EPA-415.1

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1713540 Instrument: TOC2
Matrix: Water Calibration: UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Blank	1713540-CCBB	20170731_0905-019	07/31/17 13:27
Calibration Check	1713540-CCVC	20170731_0905-030	07/31/17 16:05
Calibration Blank	1713540-CCBC	20170731_0905-031	07/31/17 16:19
Calibration Check	1713540-CCVD	20170731_0905-036	07/31/17 17:31
Calibration Blank	1713540-CCBD	20170731_0905-037	07/31/17 17:45
Calibration Check	1713540-CCVE	20170731_0905-048	07/31/17 20:23
Calibration Blank	1713540-CCBE	20170731_0905-049	07/31/17 20:37



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Project Manager: Kevin Olness

**BLANKS
EPA-415.1**Laboratory: BC LaboratoriesSDG: 17-20267Client: AMEC Environmental & Infrastructure- \$AMCNInstrument ID: TOC2 Project: AlamedaSequence: 1713540 Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	DL	LOD	LOQ	Units	C	Method
1713540-ICB1	Non-Volatile Organic Carbon	0.0090000	0.30		1.0	mg/L	U	EPA-415.1
1713540-CCB1	Non-Volatile Organic Carbon	0.014000	0.30		1.0	mg/L	U	EPA-415.1
1713540-CCB2	Non-Volatile Organic Carbon	0.047000	0.30		1.0	mg/L	U	EPA-415.1
1713540-CCB3	Non-Volatile Organic Carbon	0.082000	0.30		1.0	mg/L	U	EPA-415.1
1713540-CCB4	Non-Volatile Organic Carbon	0.15600	0.30		1.0	mg/L	U	EPA-415.1
1713540-CCB9	Non-Volatile Organic Carbon	0.0020000	0.30		1.0	mg/L	U	EPA-415.1
1713540-CCBA	Non-Volatile Organic Carbon	0.0000	0.30		1.0	mg/L	U	EPA-415.1
1713540-CCBB	Non-Volatile Organic Carbon	0.0090000	0.30		1.0	mg/L	U	EPA-415.1
1713540-CCBC	Non-Volatile Organic Carbon	0.060000	0.30		1.0	mg/L	U	EPA-415.1
1713540-CCBD	Non-Volatile Organic Carbon	0.0090000	0.30		1.0	mg/L	U	EPA-415.1
1713540-CCBE	Non-Volatile Organic Carbon	0.030000	0.30		1.0	mg/L	U	EPA-415.1



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INITIAL AND CONTINUING CALIBRATION CHECK**EPA-415.1**Laboratory: BC LaboratoriesSDG: 17-20267Client: AMEC Environmental & Infrastructure- \$AMCNProject: AlamedaInstrument ID: TOC2Calibration: UNASSIGNEDControl Limt: +/- 10.00%Sequence: 1713540

Lab Sample ID	Analyte	True	Found	%R	Units	Method
1713540-ICV1	Non-Volatile Organic Carbon	5.0000	5.4040	108	mg/L	EPA-415.1
1713540-CCV1	Non-Volatile Organic Carbon	5.0000	5.3290	107	mg/L	EPA-415.1
1713540-CCV2	Non-Volatile Organic Carbon	5.0000	5.3650	107	mg/L	EPA-415.1
1713540-CCV3	Non-Volatile Organic Carbon	5.0000	5.3770	108	mg/L	EPA-415.1
1713540-CCV4	Non-Volatile Organic Carbon	5.0000	5.3540	107	mg/L	EPA-415.1
1713540-CCV9	Non-Volatile Organic Carbon	5.0000	5.2760	106	mg/L	EPA-415.1
1713540-CCVA	Non-Volatile Organic Carbon	5.0000	5.2620	105	mg/L	EPA-415.1
1713540-CCVB	Non-Volatile Organic Carbon	5.0000	5.3030	106	mg/L	EPA-415.1
1713540-CCVC	Non-Volatile Organic Carbon	5.0000	5.3380	107	mg/L	EPA-415.1
1713540-CCVD	Non-Volatile Organic Carbon	5.0000	5.2530	105	mg/L	EPA-415.1
1713540-CCVE	Non-Volatile Organic Carbon	5.0000	5.2800	106	mg/L	EPA-415.1

* Values outside of QC limits



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HOLDING TIME SUMMARY**EPA-415.1**

Laboratory: BC Laboratories SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
27EW-01_170724	07/24/17 13:45	07/24/17 21:40	07/28/17 06:50	4.00	28.00	07/28/17 15:14	4.00	28.00	
27MW06_170724	07/24/17 09:00	07/24/17 21:40	07/28/17 06:50	4.00	28.00	07/28/17 13:33	4.00	28.00	
27MW07_170724	07/24/17 10:30	07/24/17 21:40	07/28/17 06:50	4.00	28.00	07/28/17 15:28	4.00	28.00	
27MW08_170724	07/24/17 08:20	07/24/17 21:40	07/28/17 06:50	4.00	28.00	07/28/17 15:42	4.00	28.00	
27MW09_170724	07/24/17 12:55	07/24/17 21:40	07/28/17 06:50	4.00	28.00	07/28/17 15:57	4.00	28.00	

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data From Instrument TOC2



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Analytical Runs

BC Laboratories

Sample Results							
Rep #	Time	Date:	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	8:00 am	07/28/2017		3,205		0.000	
2	8:08 am			4,235		0.000	
3	8:16 am			3,367		0.000	
4	8:24 am			3,954		0.000	
			Clean Up	Avg.	3,690	0.000	
Rep #	Time	Date:	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	8:36 am	07/28/2017		3,893		0.000	
2	8:42 am			4,460		0.000	
			QC Blank	Avg.	4,177	0.000	< PQL
Rep #	Time	Date:	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	8:55 am	07/28/2017		105,732		5.460	
2	9:01 am			103,659		5.348	
			ICV1	Avg.	104,696	5.404	2.07
Rep #	Time	Date:	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	9:10 am	07/28/2017		4,035		0.000	
2	9:15 am			4,508		0.018	
			ICB1	Avg.	4,271	0.009	< PQL
Rep #	Time	Date:	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	9:24 am	07/28/2017		10,277		0.328	
2	9:30 am			10,478		0.339	
			CRL1	Avg.	10,378	0.334	3.30
Rep #	Time	Date:	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	9:38 am	07/28/2017		3,748		0.000	
2	9:44 am			4,373		0.011	
			B[G2145-BLK1]	Avg.	4,060	0.006	< PQL
Rep #	Time	Date:	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	9:53 am	07/28/2017		105,054		5.423	
2	9:58 am			105,049		5.423	
			B[G2145-BS1]	Avg.	105,051	5.423	0.00
Rep #	Time	Date:	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	10:07 am	07/28/2017		24,778		1.233	
2	10:13 am			25,072		1.249	
			1720060-02@E	Avg.	24,925	1.241	1.29

BC Laboratories

Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	10:21 am			24,316		1.209	
2	10:27 am			24,682		1.228	
			B[G2145-ICC@E]	Avg.	24,499	1.218	1.56
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	10:35 am			25,424		1.268	
2	10:41 am			25,617		1.278	
			B[G2145-DUP1@E]	Avg.	25,520	1.273	0.79
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	10:50 am			125,764		6.662	
2	10:56 am			125,275		6.635	
			B[G2145-MS1@E]	Avg.	125,519	6.649	0.41
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	11:04 am			125,500		6.648	
2	11:10 am			125,310		6.638	
			B[G2145-MSD1@E]	Avg.	125,405	6.643	0.15
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	11:18 am			37,464		1.915	
2	11:24 am			37,677		1.927	
			1720060-01@10E	Avg.	37,570	1.921	0.62
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	11:32 am			20,645		1.011	
2	11:38 am			20,684		1.013	
			1720060-03@E	Avg.	20,664	1.012	0.20
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	11:47 am			103,295		5.329	
2	11:53 am			103,301		5.329	
			CCV1	Avg.	103,298	5.329	0.00
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	12:01 pm			4,121		0.000	
2	12:07 pm			4,715		0.028	
			CCB1	Avg.	4,418	0.014	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	12:15 pm			18,366		0.889	
2	12:21 pm			18,457		0.894	
			1720060-04@E	Avg.	18,412	0.892	0.56

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Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	12:30 pm			81,270		4.270	
2	12:36 pm			81,131		4.263	
			1719961-02@A	Avg.	81,201	4.266	0.16
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	12:44 pm			37,498		1.917	
2	12:50 pm			38,553		1.974	
			1720315-01@2G	Avg.	38,026	1.946	2.93
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	12:58 pm			5,924		0.093	
2	1:04 pm			6,688		0.135	
			B[G2146-BLK1]	Avg.	6,306	0.114	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	1:13 pm			106,581		5.505	
2	1:19 pm			106,348		5.493	
			B[G2146-BS1]	Avg.	106,464	5.499	0.22
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	1:27 pm			28,762		1.448	
2	1:33 pm			29,208		1.471	
			1720267-08@I	Avg.	28,985	1.459	1.58
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	1:41 pm			103,763		5.354	
2	1:47 pm			104,176		5.376	
			CCV2	Avg.	103,969	5.365	0.41
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	1:56 pm			4,682		0.027	
2	2:02 pm			5,424		0.067	
			CCB2	Avg.	5,053	0.047	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	2:10 pm			27,639		1.387	
2	2:16 pm			28,125		1.413	
			B[G2146-ICC@I]	Avg.	27,882	1.400	1.86
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	2:24 pm			29,466		1.485	
2	2:30 pm			30,451		1.538	
			B[G2146-DUP1@I]	Avg.	29,959	1.512	3.51

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Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	2:39 pm			131,238		6.957	
2	2:45 pm			131,300		6.960	
			B[G2146-MS1@I]	Avg.	131,269	6.959	0.04
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	2:53 pm			130,174		6.899	
2	2:59 pm			130,378		6.910	
			B[G2146-MSD1@I]	Avg.	130,276	6.905	0.16
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	3:08 pm			135,996		7.212	
2	3:13 pm			136,879		7.260	
			1720267-04@I	Avg.	136,437	7.236	0.66
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	3:22 pm			39,058		2.000	
2	3:28 pm			39,312		2.015	
			1720267-09@I	Avg.	39,185	2.008	0.75
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	3:36 pm			32,384		1.642	
2	3:42 pm			32,626		1.655	
			1720267-10@I	Avg.	32,505	1.648	0.79
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	3:51 pm			20,467		1.002	
2	3:56 pm			27,238		1.366	
			1720267-11@I	Avg.	23,852	1.184	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	4:05 pm			12,783		0.588	
2	4:11 pm			17,406		0.837	
			1720331-01@T	Avg.	15,094	0.713	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	4:19 pm			11,213		0.504	
2	4:25 pm			11,957		0.544	
			1720331-02@T	Avg.	11,585	0.524	7.63
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	4:34 pm			103,991		5.366	
2	4:40 pm			104,399		5.387	
			CCV3	Avg.	104,195	5.376	0.39

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Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	4:48 pm			5,525		0.073	
2	4:54 pm			5,872		0.091	
			CCB3	Avg.	5,699	0.082	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	5:02 pm			33,763		1.716	
2	5:08 pm			34,326		1.747	
			1720029-05@200V	Avg.	34,044	1.732	1.79
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	5:17 pm			86,205		4.536	
2	5:23 pm			87,697		4.616	
			1720029-11@10O	Avg.	86,951	4.576	1.75
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	5:31 pm			5,486		0.070	
2	5:37 pm			6,012		0.099	
			B[G2147-BLK1]	Avg.	5,749	0.084	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	5:46 pm			106,010		5.475	
2	5:52 pm			106,024		5.475	
			B[G2147-BS1]	Avg.	106,017	5.475	0.00
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	6:00 pm			274,241		14.644	
2	6:06 pm			274,652		14.666	
			1720313-05@20AF	Avg.	274,446	14.655	0.15
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	6:14 pm			252,886		13.496	
2	6:21 pm			253,575		13.533	
			B[G2147-ICC@20AF]	Avg.	253,231	13.515	0.27
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	6:29 pm			272,879		14.571	
2	6:35 pm			274,301		14.648	
			B[G2147-DUP1@20AF]	Avg.	273,590	14.610	0.53
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	6:43 pm			361,857		19.355	
2	6:49 pm			362,983		19.415	
			B[G2147-MS1@20AF]	Avg.	362,420	19.385	0.31

BC Laboratories

Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	6:58 pm			360,943		19.305	
2	7:04 pm			364,633		19.504	
		B[G2147-MSD1@20AF]	Avg.	362,788		19.405	1.03
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	7:12 pm			102,954		5.310	
2	7:18 pm			104,575		5.397	
		CCV4	Avg.	103,765		5.354	1.63
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	7:27 pm			6,743		0.138	
2	7:32 pm			7,410		0.174	
		CCB4	Avg.	7,076		0.156	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	7:41 pm			95,830		5.053	
2	7:47 pm			95,810		5.052	
		1720313-06@2K	Avg.	95,820		5.053	0.02
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	7:55 pm			113,488		6.002	
2	8:01 pm			116,159		6.146	
		1720313-07@20K	Avg.	114,823		6.074	2.37
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	8:10 pm			14,714		0.692	
2	8:16 pm			16,042		0.764	
		1720313-08@K	Avg.	15,378		0.728	9.89
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	8:24 pm			14,449		0.678	
2	8:30 pm			15,433		0.731	
		1720313-09@J	Avg.	14,941		0.705	7.52
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	8:39 pm			21,539		1.059	
2	8:44 pm			27,641		1.387	
		1720332-01@T	Avg.	24,590		1.223	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	8:53 pm			95,941		5.058	
2	8:59 pm			105,064		5.550	
		1720332-02@T	Avg.	100,503		5.304	9.28

BC Laboratories

Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	9:07 pm			19,843		0.968	
2	9:13 pm			23,166		1.147	
1720332-03@T			Avg.	21,504		1.058	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	9:22 pm			8,094		0.211	
2	9:27 pm			9,036		0.261	
B[G2148-BLK1]			Avg.	8,565		0.236	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	9:36 pm			107,133		5.535	
2	9:42 pm			106,496		5.501	
CCV5			Avg.	106,815		5.518	0.62
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	9:51 pm			6,959		0.150	
2	9:57 pm			7,690		0.189	
CCB5			Avg.	7,324		0.169	< PQL
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	10:05 pm			109,034		5.637	
2	10:11 pm			108,191		5.592	
B[G2148-BS1]			Avg.	108,613		5.615	0.80
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	10:20 pm			83,999		4.417	
2	10:26 pm			84,684		4.454	
1720405-01@J			Avg.	84,342		4.436	0.83
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	10:34 pm			77,511		4.068	
2	10:40 pm			77,619		4.074	
B[G2148-ICC@J]			Avg.	77,565		4.071	0.15
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	10:49 pm			85,093		4.476	
2	10:54 pm			85,750		4.511	
B[G2148-DUP1@J]			Avg.	85,421		4.494	0.78
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	11:03 pm			183,232		9.752	
2	11:09 pm			183,121		9.746	
B[G2148-MS1@J]			Avg.	183,177		9.749	0.06

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Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	11:18 pm			182,423		9.708	
2	11:23 pm			181,945		9.683	
		B[G2148-MSD1@J]	Avg.	182,184		9.695	0.26
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	11:32 pm			44,557		2.297	
2	11:38 pm			44,497		2.293	
		1720405-03@J	Avg.	44,527		2.295	0.17
Rep #	Time	Date: 07/28/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	11:46 pm			91,017		4.794	
2	11:52 pm			91,715		4.832	
		1720405-04@J	Avg.	91,366		4.813	0.79
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	12:01 am			87,758		4.619	
2	12:07 am			88,107		4.638	
		1720405-05@J	Avg.	87,933		4.629	0.41
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	12:15 am			50,736		2.629	
2	12:21 am			51,149		2.650	
		1720405-06@I	Avg.	50,942		2.639	0.80
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	12:30 am			106,748		5.514	
2	12:36 am			106,599		5.506	
		CCV6	Avg.	106,673		5.510	0.15
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	12:44 am			6,954		0.149	
2	12:50 am			7,358		0.171	
		CCB6	Avg.	7,156		0.160	< PQL
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	12:59 am			79,290		4.164	
2	1:05 am			80,022		4.203	
		1720405-13@J	Avg.	79,656		4.184	0.93
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	1:13 am			45,988		2.374	
2	1:19 am			46,387		2.394	
		1720405-14@J	Avg.	46,187		2.384	0.84

BC Laboratories

Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	1:28 am			76,146		3.995	
2	1:34 am			76,706		4.025	
			1720405-15@J	Avg.	76,426	4.010	0.75
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	1:42 am			114,724		6.069	
2	1:48 am			115,585		6.115	
			1720405-17@I	Avg.	115,154	6.092	0.76
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	1:57 am			107,180		5.537	
2	2:03 am			107,318		5.545	
			CCV7	Avg.	107,249	5.541	0.14
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	2:11 am			7,186		0.162	
2	2:17 am			7,373		0.172	
			CCB7	Avg.	7,279	0.167	5.99
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	2:26 am			16,111		0.767	
2	2:32 am			16,865		0.808	
			1720235-01@200K	Avg.	16,488	0.788	5.21
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	2:40 am			22,543		1.113	
2	2:46 am			22,864		1.130	
			1720235-02@100K	Avg.	22,703	1.122	1.52
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	2:55 am			11,798		0.536	
2	3:01 am			12,548		0.576	
			1720235-03@500K	Avg.	12,173	0.556	7.19
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	3:09 am			51,627		2.677	
2	3:15 am			53,270		2.765	
			1720108-08@20C	Avg.	52,448	2.721	3.23
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	3:24 am			56,372		2.932	
2	3:30 am			65,713		3.434	
			1720349-01@2F	Avg.	61,042	3.183	< PQL

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Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	3:38 am			11,416		0.514	
2	3:44 am			18,217		0.881	
			IB	Avg.	14,816	0.698	< PQL
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	3:53 am			9,708		0.423	
2	3:59 am			14,010		0.654	
			IB	Avg.	11,859	0.539	< PQL
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	4:07 am			8,569		0.362	
2	4:13 am			11,086		0.497	
			IB	Avg.	9,828	0.430	< PQL
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	4:22 am			8,992		0.385	
2	4:28 am			11,049		0.495	
			IB	Avg.	10,021	0.440	< PQL
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	4:37 am			105,223		5.432	
2	4:42 am			107,350		5.547	
			CCV8	Avg.	106,286	5.490	2.09
Rep #	Time	Date: 07/29/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	4:51 am			7,287		0.167	
2	4:57 am			8,389		0.227	
			CCB8	Avg.	7,838	0.197	< PQL

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Sample Results					
Rep #	Time	Date:	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	9:05 am	07/31/2017	102,931	5.309	
2	9:10 am		101,682	5.242	
			CCV9 Avg.	102,307	5.275
					1.27
Rep #	Time	Date:	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	9:18 am	07/31/2017	4,147	0.000	
2	9:24 am		4,243	0.004	
			CCB9 Avg.	4,195	0.002
					< PQL
Rep #	Time	Date:	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	9:33 am	07/31/2017	125,417	6.644	
2	9:39 am		123,085	6.518	
			1720313-05@50AF Avg.	124,251	6.581
					1.91
Rep #	Time	Date:	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	9:47 am	07/31/2017	120,825	6.397	
2	9:53 am		119,390	6.320	
			B[G2147-ICC@50AF Avg.]	120,108	6.359
					1.21
Rep #	Time	Date:	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	10:02 am	07/31/2017	128,378	6.803	
2	10:08 am		127,439	6.752	
			B[G2147-DUP1@50AF Avg.]	127,909	6.778
					0.75
Rep #	Time	Date:	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	10:16 am	07/31/2017	217,643	11.602	
2	10:22 am		214,855	11.452	
			B[G2147-MS1@50AF Avg.]	216,249	11.527
					1.30
Rep #	Time	Date:	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	10:30 am	07/31/2017	216,970	11.566	
2	10:36 am		215,068	11.463	
			B[G2147-MSD1@50AF Avg.]	216,019	11.515
					0.89
Rep #	Time	Date:	TOC Area (cts)	TOC Conc (PPM)	% RPD.
1	10:44 am	07/31/2017	102,458	5.284	
2	10:50 am		101,649	5.240	
			CCVA Avg.	102,053	5.262
					0.84

BC Laboratories

Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	10:58 am			3,178		0.000	
2	11:04 am			3,451		0.000	
			CCBA	Avg.	3,315	0.000	< PQL
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	11:13 am			99,386		5.244	
2	11:19 am			97,855		5.162	
			1720313-06@2K	Avg.	98,621	5.203	1.58
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	11:27 am			116,622		6.171	
2	11:33 am			117,170		6.200	
			1720313-07@20K	Avg.	116,896	6.185	0.47
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	11:41 am			16,566		0.792	
2	11:47 am			17,387		0.835	
			1720313-08@K	Avg.	16,976	0.813	5.29
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	11:56 am			20,258		0.990	
2	12:01 pm			20,700		1.014	
			1720313-09@J	Avg.	20,479	1.002	2.40
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	12:10 pm			21,733		1.070	
2	12:16 pm			27,581		1.383	
			1720332-01@T	Avg.	24,657	1.227	< PQL
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	12:24 pm			95,985		5.061	
2	12:30 pm			105,653		5.581	
			1720332-02@T	Avg.	100,819	5.321	9.77
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	12:38 pm			21,479		1.055	
2	12:44 pm			24,904		1.240	
			1720332-03@T	Avg.	23,192	1.148	< PQL
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	12:52 pm			5,234		0.057	
2	12:58 pm			6,297		0.114	
			B[G2148-BLK1]	Avg.	5,765	0.086	< PQL

BC Laboratories

Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	1:07 pm			102,380		5.279	
2	1:13 pm			103,260		5.327	
			CCVB	Avg.	102,820	5.303	0.91
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	1:21 pm			4,190		0.001	
2	1:27 pm			4,479		0.016	
			CCBB	Avg.	4,334	0.009	< PQL
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	1:36 pm			109,953		5.812	
2	1:41 pm			110,910		5.864	
			B[G2148-BS1]	Avg.	110,432	5.838	0.89
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	1:50 pm			84,612		4.450	
2	1:56 pm			86,391		4.546	
			1720405-01@J	Avg.	85,501	4.498	2.13
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	2:04 pm			80,419		4.225	
2	2:10 pm			81,725		4.295	
			B[G2148-ICC@J]	Avg.	81,072	4.260	1.64
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	2:19 pm			85,642		4.505	
2	2:25 pm			86,706		4.563	
			B[G2148-DUP1@J]	Avg.	86,174	4.534	1.28
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	2:33 pm			182,760		9.726	
2	2:39 pm			184,886		9.841	
			B[G2148-MS1@J]	Avg.	183,823	9.784	1.18
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	2:48 pm			181,623		9.665	
2	2:54 pm			183,804		9.783	
			B[G2148-MSD1@J]	Avg.	182,713	9.724	1.21
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	3:02 pm			45,899		2.369	
2	3:08 pm			46,325		2.392	
			1720405-03@J	Avg.	46,112	2.381	0.97

BC Laboratories

Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	3:16 pm			91,432		4.817	
2	3:22 pm			93,369		4.921	
			1720405-04@J	Avg.	92,401	4.869	2.14
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	3:31 pm			89,307		4.702	
2	3:36 pm			90,439		4.763	
			1720405-05@J	Avg.	89,873	4.733	1.29
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	3:45 pm			53,309		2.767	
2	3:51 pm			54,344		2.823	
			1720405-06@I	Avg.	53,826	2.795	2.00
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	3:59 pm			103,290		5.328	
2	4:05 pm			103,638		5.347	
			CCVC	Avg.	103,464	5.338	0.36
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	4:13 pm			5,361		0.064	
2	4:19 pm			5,194		0.055	
			CCBC	Avg.	5,277	0.060	< PQL
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	4:28 pm			80,390		4.222	
2	4:34 pm			81,597		4.288	
			1720405-13@J	Avg.	80,993	4.255	1.55
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	4:42 pm			45,681		2.357	
2	4:48 pm			46,337		2.392	
			1720405-14@J	Avg.	46,009	2.374	1.47
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	4:56 pm			75,749		3.974	
2	5:02 pm			77,950		4.092	
			1720405-15@J	Avg.	76,849	4.033	2.93
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	5:11 pm			112,409		5.944	
2	5:17 pm			113,992		6.029	
			1720405-17@I	Avg.	113,200	5.986	1.42

BC Laboratories

Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	5:25 pm			101,391		5.226	
2	5:31 pm			102,377		5.279	
			CCVD	Avg.	101,884	5.253	1.01
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	5:39 pm			4,290		0.006	
2	5:45 pm			4,419		0.013	
			CCBD	Avg.	4,354	0.010	< PQL
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	5:54 pm			16,311		0.778	
2	6:00 pm			16,725		0.800	
		1720235-01@200K	Avg.	16,518	0.789	2.79	
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	6:08 pm			22,816		1.128	
2	6:14 pm			23,037		1.140	
		1720235-02@100K	Avg.	22,927	1.134	1.06	
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	6:22 pm			12,340		0.565	
2	6:28 pm			12,979		0.598	
		1720235-03@500K	Avg.	12,659	0.581	5.67	
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	6:37 pm			51,537		2.672	
2	6:42 pm			53,199		2.761	
		1720108-08@20C	Avg.	52,368	2.716	3.28	
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	6:51 pm			61,130		3.188	
2	6:57 pm			68,680		3.594	
		1720349-01@2F	Avg.	64,905	3.391	< PQL	
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	7:05 pm			13,091		0.605	
2	7:11 pm			19,212		0.934	
		IB	Avg.	16,151	0.770	< PQL	
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	7:19 pm			11,844		0.537	
2	7:25 pm			14,659		0.689	
		IB	Avg.	13,251	0.613	< PQL	

BC Laboratories

Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	7:34 pm			10,421		0.462	
2	7:40 pm			12,524		0.575	
			IB	Avg.	11,473	0.519	< PQL
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	7:48 pm			10,479		0.465	
2	7:54 pm			11,655		0.528	
			IB	Avg.	11,067	0.496	< PQL
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	8:03 pm			103,488		5.338	
2	8:08 pm			105,334		5.438	
			B[G2148-BS1]	Avg.	104,411	5.388	1.86
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	8:17 pm			101,360		5.225	
2	8:23 pm			103,412		5.335	
			CCVE	Avg.	102,386	5.280	2.08
Rep #	Time	Date: 07/31/2017	TOC Area	(cts)	TOC Conc	(PPM)	% RPD.
1	8:31 pm			4,359		0.010	
2	8:37 pm			5,122		0.051	
			CCBE	Avg.	4,740	0.030	< PQL



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Calibration Summary



Date Prepared: 06/30/2017 By:

Date Approved: By:

TOC

OI Corporation
College Station, TX 77845 USA

No Customer
None, None - None

Sample Results Summary

Spl Vial		Num	Act	Rep	Rep	Method	Type	Dil	Customer ID	Mode	Avg. Area	Avg. Mass	Avg. Conc	(PPM)	Std. Dev	% RSD	Notes
#	#	Sample ID									(cts)	(ug)	(PPM)				
1	-	Clean Up	6	6	DefaultCleanUpMethod		Clean Up	1 : 1	00000000	TIC	282	0.000	0.000	111	39.38		
3	1	TOC-RW	4	4	170629 - 5 mls - Jun 29, 2017; 03-00-31 PM		Standard	1 : 1	00000000	TOC	4,910	0.000	0.000	479	9.76		
4	2	TOC-Std#1-1.000 PPM	4	4	170629 - 5 mls - Jun 29, 2017; 03-00-31 PM		Standard	1 : 1	00000000	TOC	26,062	5.000	1.000	233	0.89		
5	3	TOC-Std#2-5.000 PPM	4	4	170629 - 5 mls - Jun 29, 2017; 03-00-31 PM		Standard	1 : 1	00000000	TOC	100,281	25.000	5.000	477	0.48		
6	4	TOC-Std#3-10.000 PPM	4	4	170629 - 5 mls - Jun 29, 2017; 03-00-31 PM		Standard	1 : 1	00000000	TOC	192,988	50.000	10.000	1,456	0.75		



Date Prepared: 06/30/2017 By:

Date Approved: By:

TOC

OI Corporation
College Station, TX 77845 USA

No Customer
None, None - None

Sample Results

Spl #:	1	Sample ID :	Clean Up	Type :	Clean Up	Date:	06/29/2017	Status:	Passed
Vial #:	-	Method :	DefaultCleanUpMethod	Dilution	1 : 1	Customer ID:	00000000		

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:14 pm	447	0.000	0.000	5,230	0.000	0.000
2	3:22 pm	167	0.000	0.000	5,734	0.000	0.000
3	3:29 pm	147	0.000	0.000	4,610	0.000	0.000
4	3:37 pm	290	0.000	0.000	4,772	0.000	0.000
5	3:44 pm	314	0.000	0.000	4,618	0.000	0.000
6	3:52 pm	330	0.000	0.000	4,493	0.000	0.000
Avg.		282	0.000	0.000	4,910	0.000	0.000
Std.Dev.		111			479		
% RSD.		39.38			9.76		

Spl #:	3	Sample ID :	TOC-RW	Type :	Standard	Date:	06/29/2017	Status:	Passed
Vial #:	1	Method :	170629 - 5 mls - Jun 29, 2017;	Dilution	1 : 1	Customer ID:	00000000		

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:21 pm	-	-	-	5,975	0.000	0.000
2	4:27 pm	-	-	-	7,250	0.000	0.000
3	4:33 pm	-	-	-	6,387	0.000	0.000
4	4:39 pm	-	-	-	7,130	0.000	0.000
Avg.		-	-	-	6,686	0.000	0.000
Std.Dev.					608		
% RSD.					9.10		



Date Prepared: 06/30/2017 By:

Date Approved: By:

TOC

OI Corporation
College Station, TX 77845 USA

No Customer
None, None - None

Spl #: 4 Sample ID : TOC-Std#1-1.000 PPM Type : Standard Date: 06/29/2017
Vial #: 2 Method : 170629 - 5 mls - Jun 29, 2017; Dilution 1 : 1 Customer ID: 00000000 Status: Passed

Rep #	Time	TIC Area	TIC Mass	TIC Conc	TOC Area	TOC Mass	TOC Conc
		(cts)	(ugC)	(PPM)	(cts)	(ugC)	(PPM)
1	4:48 pm	-	-	-	26,199	5.000	1.000
2	4:54 pm	-	-	-	26,116	5.000	1.000
3	5:00 pm	-	-	-	25,718	5.000	1.000
4	5:05 pm	-	-	-	26,214	5.000	1.000
Avg.		-	-	-	26,062	5.000	1.000
Std.Dev.					233		
% RSD.					0.89		

Spl #: 5 Sample ID : TOC-Std#2-5.000 PPM Type : Standard Date: 06/29/2017
Vial #: 3 Method : 170629 - 5 mls - Jun 29, 2017; Dilution 1 : 1 Customer ID: 00000000 Status: Passed

Rep #	Time	TIC Area	TIC Mass	TIC Conc	TOC Area	TOC Mass	TOC Conc
		(cts)	(ugC)	(PPM)	(cts)	(ugC)	(PPM)
1	5:14 pm	-	-	-	100,930	25.000	5.000
2	5:19 pm	-	-	-	99,990	25.000	5.000
3	5:26 pm	-	-	-	100,341	25.000	5.000
4	5:31 pm	-	-	-	99,865	25.000	5.000
Avg.		-	-	-	100,281	25.000	5.000
Std.Dev.					477		
% RSD.					0.48		



Date Prepared: 06/30/2017 By:

Date Approved: By:

TOC

OI Corporation
College Station, TX 77845 USA

No Customer
None, None - None

Sample ID : TOC-Std#3-10.000 PPM Date: 06/29/2017 Status: Passed
Vial #: 4 Method : 170629 - 5 mls - Jun 29, 2017; Type : Standard
Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area	TIC Mass	TIC Conc	TOC Area	TOC Mass	TOC Conc
		(cts)	(ugC)	(PPM)	(cts)	(ugC)	(PPM)
1	5:40 pm	-	-	-	194,519	50.000	10.000
2	5:46 pm	-	-	-	192,526	50.000	10.000
3	5:52 pm	-	-	-	193,725	50.000	10.000
4	5:57 pm	-	-	-	191,182	50.000	10.000
Avg.		-	-	-	192,988	50.000	10.000
Std.Dev.					1,456		
% RSD.					0.75		



Date Prepared: 06/30/2017 By:

Date Approved: By:

TOC

OI Corporation
College Station, TX 77845 USA

No Customer
None, None - None

Method Summary**Method Details**

Method Name:	170629 - 5 mls - Jun 29, 2017	Sample Dilution:	Disabled	Times	React	Detect	Temp	React	Detect
Date Created:	06/29/2017	Dilution Mode:	Automatic	TIC	01:30	03:00	TIC	70	70
Time Created:	15:01	Dilution Factor:	1 : 1	TOC	02:00	03:15	TOC	98	98
Created By:	ALW	Sample Stirring in A/S:	Enabled						

Analysis Mode: NPOC Only

Sparging Mode:	Internal	Outlier Removal Criteria	Peak Detection Parameters
Pre-Acid Volume (mL):	1.000	Additional Replicates:	0
Sparge Time (mm:ss):	02:00	Max. % RSD.	3.00

Volumes

Sample Volume (mL):	5.000	Rinse Volume (mL):	10.000
Acid Volume (mL):	0.500	Rinses Per Sample:	1
Persulfate Volume(mL):	1.000	Rinses Per Replicate:	0

Other

SysPressure:	20.00
--------------	-------

Calibration Summary**Calibration Generation**

Generation Mode:	Manual	Parameter	Low	High	Failure
# of Stds:	5	RF (ugC/K-cts)	-	-	-
Dilution Factor:	10 : 1	R2	0.995	1.000	Abort
Dilution Volume (mL):	1.000	Offset (area) (cts)	-	-	-
Add Zero as Std #1:	No	Offset (mass) (ugC)	-	-	-

Calibration Mode

Primary Mode:	TOC	Checks, QC's and Actions				
		Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
User for ALL Modes:	Enabled	CK Std	n/a	10,000.00	Continue	Continue
		QC #1	5.000	10,000.00	Continue	Continue
		QC #2	5.000	15,000.00	Continue	Continue
		QC #3	1.000	50,000.00	Continue	Continue
		QC #4	0.001	100,000.00	Continue	Continue
		SST	0.000	0.00	Continue	Continue



OI Corporation
College Station, TX 77845 USA

Date Prepared: 06/30/2017 By:

Date Approved: By:

TOC

No Customer
None, None - None

Calibration Details

Calibration Mode: TOC
Date Calibrated: 06/29/2017
Time Calibrated: 5:57 pm
Calibrated By: ALW
RF (ugC/k-cts): 0.2688
R2: 0.9999
Offset (area)(cts): 7099
Offset (mass)(ugC): -1.908
Reagent Blank (cts): 1,837

Calibration Settings

Stock Conc. For Dilutions: (PPM) 1,000.000
of Reagent Blanks: 2
Total Flowrate w/EFC: 50 ml/min
Check Standards: Subtract Offset
Regression type: Unweighted



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Batch Information



PREPARATION BENCH SHEET

B[G2146]

BC Laboratories

Printed: 8/24/2017 10:33:44AM

Matrix: Water

Prepared using: Wet Chem - General Preparation

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720029-05 V	i415.1w NVOC	7/28/2017 6:50AM	ALW	100	100					
1720029-11 O	i415.1w NVOC	7/28/2017 6:50AM	ALW	100	100					
1720108-08 C	i415.1w NVOC	7/28/2017 6:50AM	ALW	100	100					
1720267-04 J	i415.1w NVOC	7/28/2017 6:50AM	ALW	100	100					
1720267-08 I	i415.1w NVOC	7/28/2017 6:50AM	ALW	100	100					
1720267-09 E	i415.1w NVOC	7/28/2017 6:50AM	ALW	100	100					
1720267-10 I	i415.1w NVOC	7/28/2017 6:50AM	ALW	100	100					
1720267-11 I	i415.1w NVOC	7/28/2017 6:50AM	ALW	100	100					
B[G2146-BLK1]	QC	7/28/2017 6:50AM	ALW	100	100					
B[G2146-BS1]	QC	7/28/2017 6:50AM	ALW	100	100	7D13023			500	
B[G2146-DUP1]	QC	7/28/2017 6:50AM	ALW	100	100		1720267-08			
B[G2146-MS1]	QC	7/28/2017 6:50AM	ALW	99.5	100	7D13023	1720267-08		500	
B[G2146-MSD1]	QC	7/28/2017 6:50AM	ALW	99.5	100	7D13023	1720267-08		500	

Spike Mixes	Description	Solvent	Prepared	Expires
7D13023	TOC KHP 1000 /SPIKE	H3P04 IN WATER	4/13/2017 by ** Vendor **	3/31/2018



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Sequence Information



ANALYSIS SEQUENCE

1713540

Instrument: TOC2

Calibration ID:

Sequence Date: 07/28/2017

Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713540-ICV1	QC		1		7F15031		
1713540-ICB1	QC		2				
1713540-CRL1	QC		3		7G24019		
B[G2145-BLK1]	QC		4				
B[G2145-BS1]	QC		5				
1720060-02	i415.1w NVOC	E	6				
1720060-02	iSM5310Cw NVOC	E	6				BatchQC
B[G2145-DUP1]	QC		7				
B[G2145-MS1]	QC		8				
B[G2145-MSD1]	QC		9				
1720060-01	i415.1w NVOC	E	10				
1720060-03	i415.1w NVOC	E	11				
1713540-CCV1	QC		12		7G24020		
1713540-CCB1	QC		13				
1720060-04	i415.1w NVOC	E	14				
1719961-02	i415.1w NVOC	A	15				
1720315-01	iSM5310Cw NVOC	G	16				
B[G2146-BLK1]	QC		17				
B[G2146-BS1]	QC		18				
1720267-08	i415.1w NVOC	I	19				
1713540-CCV2	QC		20		7G24020		
1713540-CCB2	QC		21				
B[G2146-DUP1]	QC		22				
B[G2146-MS1]	QC		23				
B[G2146-MSD1]	QC		24				
1720267-04	i415.1w NVOC	J	25				
1720267-09	i415.1w NVOC	E	26				
1720267-10	i415.1w NVOC	I	27				
1720267-11	i415.1w NVOC	I	28				
1713540-CCV3	QC		29		7G24020		
1713540-CCB3	QC		30				
1720029-05	i415.1w NVOC	V	31				
1720029-11	i415.1w NVOC	O	32				
B[G2147-BLK1]	QC		33				
B[G2147-BS1]	QC		34				
1713540-CCV4	QC		35		7G24020		
1713540-CCB4	QC		36				
1713540-CCV9	QC		37		7G24020		
1713540-CCB9	QC		38				



ANALYSIS SEQUENCE

1713540

Instrument: TOC2

Calibration ID:

Sequence Date: 07/28/2017

Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1720313-05	i415.1w NVOC	AF	39				
B[G2147-DUP1	QC		40				
B[G2147-MS1	QC		41				
B[G2147-MSD1	QC		42				
1713540-CCVA	QC		43		7G24020		
1713540-CCBA	QC		44				
1720313-06	i415.1w NVOC	K	45				
1720313-07	i415.1w NVOC	K	46				
1720313-08	i415.1w NVOC	K	47				
1720313-09	i415.1w NVOC	J	48				
B[G2148-BLK1	QC		49				
1713540-CCVB	QC		50		7G24020		
1713540-CCBB	QC		51				
1720405-01	i415.1w NVOC	J	52				
B[G2148-DUP1	QC		53				
B[G2148-MS1	QC		54				
B[G2148-MSD1	QC		55				
1720405-03	i415.1w NVOC	J	56				
1720405-04	i415.1w NVOC	J	57				
1720405-05	i415.1w NVOC	J	58				
1720405-06	i415.1w NVOC	I	59				
1713540-CCVC	QC		60		7G24020		
1713540-CCBC	QC		61				
1720405-13	i415.1w NVOC	J	62				
1720405-14	i415.1w NVOC	J	63				
1720405-15	i415.1w NVOC	I	64				
1720405-17	i415.1w NVOC	I	65				
1713540-CCVD	QC		66		7G24020		
1713540-CCBD	QC		67				
1720235-01	iSM5310Cw NVOC	K	68				
1720235-02	iSM5310Cw NVOC	K	69				
1720235-03	iSM5310Cw NVOC	K	70				
1720108-08	i415.1w NVOC	C	71				
1720349-01	i415.1w NVOC	F	72				
B[G2148-BS1	QC		73				
1713540-CCVE	QC		74		7G24020		
1713540-CCBE	QC		75				



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

BC Laboratories

4100 Atlas Court

Bakersfield, CA 93308

Phone: 661-327-4911

SDG: 17-20267

Class: WET

Method: SM-4500SD



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSES DATA PACKAGE COVER PAGE SM-4500SD

Laboratory: BC Laboratories

SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Client Sample Id:	Lab Sample Id:
<u>26PZ01_170724</u>	<u>1720267-01</u>
<u>26PZ02_170724</u>	<u>1720267-02</u>
<u>26PZ03_170724</u>	<u>1720267-03</u>
<u>27EW-01_170724</u>	<u>1720267-04</u>
<u>27MW06_170724</u>	<u>1720267-08</u>
<u>27MW07_170724</u>	<u>1720267-09</u>
<u>27MW08_170724</u>	<u>1720267-10</u>
<u>27MW09_170724</u>	<u>1720267-11</u>

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature:

Name: Sara Guron

Date:

08-24-2017

Title:

QA/QC Manager



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD DETECTION AND REPORTING LIMITS

SM-4500SD

Laboratory: BC Laboratories

SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN

Project: Alameda

Matrix: Water

Instrument: SPEC06

Analyte	DL	LOD	LOQ	Units
Total Sulfide	0.05	0.1	0.1	mg/L



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
SM-4500SD

26PZ01_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-01 File ID:
Sampled: 07/24/17 11:16 Prepared: 07/28/17 12:45 Analyzed: 07/28/17 12:45
Solids: 0.00 Preparation: No Prep Initial/Final: 25 ml / 25 ml
Batch: B[G2469 Sequence: 1713618 Calibration: UNASSIGNED Instrument: SPEC06

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
18496-25-8	Total Sulfide	0.20	0.10	0.20	0.20	2	UD	SM-4500SD



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
SM-4500SD

26PZ02_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-02 File ID:
Sampled: 07/24/17 10:23 Prepared: 07/28/17 12:45 Analyzed: 07/28/17 12:45
Solids: 0.00 Preparation: No Prep Initial/Final: 25 ml / 25 ml
Batch: B[G2469 Sequence: 1713618 Calibration: UNASSIGNED Instrument: SPEC06

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
18496-25-8	Total Sulfide	0.10	0.050	0.10	0.10	1	U	SM-4500SD



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
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Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

**INORGANIC ANALYSIS DATA SHEET
SM-4500SD****26PZ03_170724**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-03 File ID:
Sampled: 07/24/17 12:05 Prepared: 07/28/17 12:45 Analyzed: 07/28/17 12:45
Solids: 0.00 Preparation: No Prep Initial/Final: 25 ml / 25 ml
Batch: B[G2470 Sequence: 1713618 Calibration: UNASSIGNED Instrument: SPEC06

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
18496-25-8	Total Sulfide	0.10	0.050	0.10	0.10	1	U	SM-4500SD



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
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Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
SM-4500SD

27EW-01_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-04 File ID:
Sampled: 07/24/17 13:45 Prepared: 07/28/17 12:45 Analyzed: 07/28/17 12:45
Solids: 0.00 Preparation: No Prep Initial/Final: 25 ml / 25 ml
Batch: B[G2470 Sequence: 1713618 Calibration: UNASSIGNED Instrument: SPEC06

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
18496-25-8	Total Sulfide	0.10	0.050	0.10	0.10	1	U	SM-4500SD



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
SM-4500SD

27MW06_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-08 File ID:
Sampled: 07/24/17 09:00 Prepared: 07/28/17 12:45 Analyzed: 07/28/17 12:45
Solids: 0.00 Preparation: No Prep Initial/Final: 25 ml / 25 ml
Batch: B[G2470 Sequence: 1713618 Calibration: UNASSIGNED Instrument: SPEC06

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
18496-25-8	Total Sulfide	0.10	0.050	0.10	0.10	1	U	SM-4500SD



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
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Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
SM-4500SD

27MW07_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-09 File ID:
Sampled: 07/24/17 10:30 Prepared: 07/28/17 12:45 Analyzed: 07/28/17 12:45
Solids: 0.00 Preparation: No Prep Initial/Final: 25 ml / 25 ml
Batch: B[G2470 Sequence: 1713618 Calibration: UNASSIGNED Instrument: SPEC06

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
18496-25-8	Total Sulfide	0.10	0.050	0.10	0.10	1	U	SM-4500SD



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
SM-4500SD

27MW08_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-10 File ID:
Sampled: 07/24/17 08:20 Prepared: 07/28/17 12:45 Analyzed: 07/28/17 12:45
Solids: 0.00 Preparation: No Prep Initial/Final: 25 ml / 25 ml
Batch: B[G2470 Sequence: 1713618 Calibration: UNASSIGNED Instrument: SPEC06

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
18496-25-8	Total Sulfide	0.10	0.050	0.10	0.10	1	U	SM-4500SD



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INORGANIC ANALYSIS DATA SHEET
SM-4500SD

27MW09_170724

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: 1720267-11 File ID:
Sampled: 07/24/17 12:55 Prepared: 07/28/17 12:45 Analyzed: 07/28/17 12:45
Solids: 0.00 Preparation: No Prep Initial/Final: 25 ml / 25 ml
Batch: B[G2470 Sequence: 1713618 Calibration: UNASSIGNED Instrument: SPEC06

CAS NO.	Analyte	Concentration (mg/L)	DL	LOD	LOQ	Dilution Factor	Q	Method
18496-25-8	Total Sulfide	0.10	0.050	0.10	0.10	1	U	SM-4500SD



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
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Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

PREPARATION BATCH SUMMARY**SM-4500SD**

Laboratory: BC Laboratories SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Batch: B[G2469 Batch Matrix: Water Preparation: No Prep

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
26PZ01_170724	1720267-01		07/28/17 12:45	
26PZ02_170724	1720267-02		07/28/17 12:45	
Blank	B[G2469-BLK1		07/28/17 12:45	
LCS	B[G2469-BS1		07/28/17 12:45	
Duplicate	B[G2469-DUP1		07/28/17 12:45	
Matrix Spike	B[G2469-MS1		07/28/17 12:45	
Matrix Spike Dup	B[G2469-MSD1		07/28/17 12:45	



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

PREPARATION BATCH SUMMARY

SM-4500SD

Laboratory: BC Laboratories SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Batch: B[G2470 Batch Matrix: Water Preparation: No Prep

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
26PZ03_170724	1720267-03		07/28/17 12:45	
27EW-01_170724	1720267-04		07/28/17 12:45	
27MW06_170724	1720267-08		07/28/17 12:45	
27MW07_170724	1720267-09		07/28/17 12:45	
27MW08_170724	1720267-10		07/28/17 12:45	
27MW09_170724	1720267-11		07/28/17 12:45	
Blank	B[G2470-BLK1		07/28/17 12:45	
LCS	B[G2470-BS1		07/28/17 12:45	
27MW06_170724	B[G2470-DUP1		07/28/17 12:45	
27MW06_170724	B[G2470-MS1		07/28/17 12:45	
27MW06_170724	B[G2470-MSD1		07/28/17 12:45	



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

**METHOD BLANK DATA SHEET
SM-4500SD**

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: B[G2469-BLK1 File ID:
Prepared: 07/28/17 12:45 Preparation: No Prep Initial/Final: 25 ml / 25 ml
Analyzed: 07/28/17 12:45 Instrument: SPEC06
Batch: B[G2469 Sequence: 1713618 Calibration: UNASSIGNED

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
18496-25-8	Total Sulfide	0.10	0.050	0.10	0.10	U



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

METHOD BLANK DATA SHEET SM-4500SD

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water Laboratory ID: B[G2470-BLK1] File ID:
Prepared: 07/28/17 12:45 Preparation: No Prep Initial/Final: 25 ml / 25 ml
Analyzed: 07/28/17 12:45 Instrument: SPEC06
Batch: B[G2470] Sequence: 1713618 Calibration: UNASSIGNED

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
18496-25-8	Total Sulfide	0.10	0.050	0.10	0.10	U



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

DUPLICATES**SM-4500SD****Duplicate**Laboratory: BC LaboratoriesSDG: 17-20267Client: AMEC Environmental & Infrastructure- \$AMCNProject: AlamedaMatrix: WaterLaboratory ID: B[G2469-DUP1Batch: B[G2469Lab Source ID: 1720121-13Preparation: No PrepInitial/Final: 25 ml / 25 mlSource Sample Name: Duplicate

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/L)	C	DUPLICATE CONCENTRATION (mg/L)	C	RPD %	Q	METHOD
Total Sulfide	10	0.010610		ND				SM-4500SD

* Values outside of QC limits



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

DUPLICATES**SM-4500SD****27MW06 170724**Laboratory: BC LaboratoriesSDG: 17-20267Client: AMEC Environmental & Infrastructure- \$AMCNProject: AlamedaMatrix: WaterLaboratory ID: B[G2470-DUP1Batch: B[G2470Lab Source ID: 1720267-08Preparation: No PrepInitial/Final: 25 ml / 25 mlSource Sample Name: 27MW06_170724

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/L)	C	DUPLICATE CONCENTRATION (mg/L)	C	RPD %	Q	METHOD
Total Sulfide	10	0.0060600		ND				SM-4500SD

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
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Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

SM-4500SD

Matrix Spike

Laboratory: BC Laboratories SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Matrix: Water

Batch: B[G2469] Laboratory ID: B[G2469-MS1

Preparation: No Prep Initial/Final: 25 ml / 25 ml

Source Sample Number: 1720121-13

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC. #	QC LIMITS REC.
Total Sulfide	0.50000	ND	0.46567	93.1	80 - 120

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC. #	% RPD #	QC LIMITS	REC.
Total Sulfide	0.50000	0.45925	91.8	1.39	10	80 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
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San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY
SM-4500SD

27MW06 170724

Laboratory: BC Laboratories SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Matrix: Water

Batch: B[G2470] Laboratory ID: B[G2470-MS1

Preparation: No Prep Initial/Final: 25 ml / 25 ml

Source Sample Number: 1720267-08

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC. #	QC LIMITS REC.
Total Sulfide	0.50000	ND	0.42071	84.1	80 - 120

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC. #	% RPD #	QC LIMITS RPD	REC.
Total Sulfide	0.50000	0.42393	84.8	0.762	10	80 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

LCS RECOVERY
SM-4500SD

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water
Batch: B[G2469 Laboratory ID: B[G2469-BS1
Preparation: No Prep Initial/Final: 25 ml / 25 ml

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC. #	QC LIMITS REC.
Total Sulfide	0.50000	0.49938	99.9	90 - 110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

LCS RECOVERY
SM-4500SD

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Matrix: Water
Batch: B[G2470 Laboratory ID: B[G2470-BS1
Preparation: No Prep Initial/Final: 25 ml / 25 ml

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC. #	QC LIMITS REC.
Total Sulfide	0.50000	0.49938	99.9	90 - 110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

ANALYSIS BATCH (SEQUENCE) SUMMARY SM-4500SD

Laboratory: BC Laboratories SDG: 17-20267
Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda
Sequence: 1713618 Instrument: SPEC06
Matrix: Water Calibration: UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	1713618-ICV1		07/28/17 12:45
Initial Cal Blank	1713618-ICB1		07/28/17 12:45
LCS	B[G2469-BS1		07/28/17 12:45
LCS	B[G2470-BS1		07/28/17 12:45
Blank	B[G2469-BLK1		07/28/17 12:45
Blank	B[G2470-BLK1		07/28/17 12:45
Duplicate	B[G2469-DUP1		07/28/17 12:45
Matrix Spike	B[G2469-MS1		07/28/17 12:45
Matrix Spike Dup	B[G2469-MSD1		07/28/17 12:45
Calibration Check	1713618-CCV1		07/28/17 12:45
Calibration Blank	1713618-CCB1		07/28/17 12:45
26PZ01_170724	1720267-01		07/28/17 12:45
26PZ02_170724	1720267-02		07/28/17 12:45
27MW06_170724	1720267-08		07/28/17 12:45
27MW06_170724	B[G2470-DUP1		07/28/17 12:45
27MW06_170724	B[G2470-MS1		07/28/17 12:45
27MW06_170724	B[G2470-MSD1		07/28/17 12:45
26PZ03_170724	1720267-03		07/28/17 12:45
Calibration Check	1713618-CCV2		07/28/17 12:45
Calibration Blank	1713618-CCB2		07/28/17 12:45
27EW-01_170724	1720267-04		07/28/17 12:45
27MW07_170724	1720267-09		07/28/17 12:45
27MW08_170724	1720267-10		07/28/17 12:45
27MW09_170724	1720267-11		07/28/17 12:45
Calibration Check	1713618-CCV3		07/28/17 12:45
Calibration Blank	1713618-CCB3		07/28/17 12:45



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

BLANKS
SM-4500SDLaboratory: BC LaboratoriesSDG: 17-20267Client: AMEC Environmental & Infrastructure- \$AMCNInstrument ID: SPEC06 Project: AlamedaSequence: 1713618 Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	DL	LOD	LOQ	Units	C	Method
1713618-CCB1	Total Sulfide	0.0000	0.050		0.10	mg/L	U	SM-4500SD
1713618-CCB2	Total Sulfide	0.0000	0.050		0.10	mg/L	U	SM-4500SD
1713618-CCB3	Total Sulfide	0.0000	0.050		0.10	mg/L	U	SM-4500SD
1713618-ICB1	Total Sulfide	0.0000	0.050		0.10	mg/L	U	SM-4500SD



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM
Project: Alameda
Project Number: 5023146096
Project Manager: Kevin Olness

INITIAL AND CONTINUING CALIBRATION CHECK**SM-4500SD**Laboratory: BC LaboratoriesSDG: 17-20267Client: AMEC Environmental & Infrastructure- \$AMCNProject: AlamedaInstrument ID: SPEC06Calibration: UNASSIGNEDControl Limt: +/- %Sequence: 1713618

Lab Sample ID	Analyte	True	Found	%R	Units	Method
1713618-CCV1	Total Sulfide	0.50000	0.49938	99.9	mg/L	SM-4500SD
1713618-CCV2	Total Sulfide	0.50000	0.49938	99.9	mg/L	SM-4500SD
1713618-CCV3	Total Sulfide	0.50000	0.49938	99.9	mg/L	SM-4500SD
1713618-ICV1	Total Sulfide	0.50000	0.48814	97.6	mg/L	SM-4500SD

* Values outside of QC limits



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

HOLDING TIME SUMMARY SM-4500SD

Laboratory: BC Laboratories SDG: 17-20267

Client: AMEC Environmental & Infrastructure- \$AMCN Project: Alameda

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
26PZ01_170724	07/24/17 11:16	07/24/17 21:40	07/28/17 12:45	4.00	7.00	07/28/17 12:45	4.00	7.00	
26PZ02_170724	07/24/17 10:23	07/24/17 21:40	07/28/17 12:45	4.00	7.00	07/28/17 12:45	4.00	7.00	
26PZ03_170724	07/24/17 12:05	07/24/17 21:40	07/28/17 12:45	4.00	7.00	07/28/17 12:45	4.00	7.00	
27EW-01_170724	07/24/17 13:45	07/24/17 21:40	07/28/17 12:45	4.00	7.00	07/28/17 12:45	4.00	7.00	
27MW06_170724	07/24/17 09:00	07/24/17 21:40	07/28/17 12:45	4.00	7.00	07/28/17 12:45	4.00	7.00	
27MW07_170724	07/24/17 10:30	07/24/17 21:40	07/28/17 12:45	4.00	7.00	07/28/17 12:45	4.00	7.00	
27MW08_170724	07/24/17 08:20	07/24/17 21:40	07/28/17 12:45	4.00	7.00	07/28/17 12:45	4.00	7.00	
27MW09_170724	07/24/17 12:55	07/24/17 21:40	07/28/17 12:45	4.00	7.00	07/28/17 12:45	4.00	7.00	

* Holding time not met

Note: If Prep or Analysis are performed within the hour (if holding time is based on hours) or within the day (if holding time is based on days), then the sample is not flagged as outside holding times. Calculated number of days are based on date received or date prepared depending on the test.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data From Instrument SPEC06



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Batch Information



PREPARATION BENCH SHEET

B[G2469]

BC Laboratories

Printed: 8/24/2017 10:33:44AM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720121-11 I	iSM4500SDw Total Sulfide	7/28/2017 12:45PM	DIW	25	25					
1720121-12 I	iSM4500SDw Total Sulfide	7/28/2017 12:45PM	DIW	25	25					
1720121-13 I	iSM4500SDw Total Sulfide	7/28/2017 12:45PM	DIW	25	25					
1720121-14 H	iSM4500SDw Total Sulfide	7/28/2017 12:45PM	DIW	25	25					
1720122-03 U	iSM4500SDw Total Sulfide	7/28/2017 12:45PM	DIW	25	25					
1720122-04 N	iSM4500SDw Total Sulfide	7/28/2017 12:45PM	DIW	25	25					
1720122-05 K	iSM4500SDw Total Sulfide	7/28/2017 12:45PM	DIW	25	25					
1720122-06 K	iSM4500SDw Total Sulfide	7/28/2017 12:45PM	DIW	25	25					
1720267-01 G	iSM4500SDw Total Sulfide	7/28/2017 12:45PM	DIW	25	25					
1720267-02 G	iSM4500SDw Total Sulfide	7/28/2017 12:45PM	DIW	25	25					
B[G2469-BLK1]	QC	7/28/2017 12:45PM	DIW	25	25					
B[G2469-BS1]	QC	7/28/2017 12:45PM	DIW	25	25	7G06078		2500		
B[G2469-DUP1]	QC	7/28/2017 12:45PM	DIW	25	25		1720121-13			
B[G2469-MS1]	QC	7/28/2017 12:45PM	DIW	25	25	7G06078	1720121-13	2500		
B[G2469-MSD1]	QC	7/28/2017 12:45PM	DIW	25	25	7G06078	1720121-13	2500		

Spike Mixes	Description	Solvent	Prepared	Expires
7G06078	SULFIDE 5.0 WORK	H2O	7/6/2017 by Daniel Wenceslao	1/8/2018



PREPARATION BENCH SHEET

B|G2470

BC Laboratories

Printed: 8/24/2017 10:33:44AM

Matrix: Water

Prepared using: Wet Chem - No Prep

(No Surrogate)

Lab Number	Analysis	Prepared	By	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	ul Surrogate	% Solids
1720179-02 H	iSM4500SDw Diss Sulfide	7/28/2017 12:45PM	DIW	25	25					
1720267-03 G	iSM4500SDw Total Sulfide	7/28/2017 12:45PM	DIW	25	25					
1720267-04 I	iSM4500SDw Total Sulfide	7/28/2017 12:45PM	DIW	25	25					
1720267-08 H	iSM4500SDw Diss Sulfide	7/28/2017 12:45PM	DIW	25	25					
1720267-08 H	iSM4500SDw Total Sulfide	7/28/2017 12:45PM	DIW	25	25					
1720267-09 H	iSM4500SDw Total Sulfide	7/28/2017 12:45PM	DIW	25	25					
1720267-10 H	iSM4500SDw Total Sulfide	7/28/2017 12:45PM	DIW	25	25					
1720267-11 H	iSM4500SDw Total Sulfide	7/28/2017 12:45PM	DIW	25	25					
1720309-01 E	iSM4500SDw Total Sulfide	7/28/2017 12:45PM	DIW	25	25					
1720309-02 E	iSM4500SDw Total Sulfide	7/28/2017 12:45PM	DIW	25	25					
1720315-01 L	iSM4500SDw Diss Sulfide	7/28/2017 12:45PM	DIW	25	25					
B G2470-BLK1	QC	7/28/2017 12:45PM	DIW	25	25					
B G2470-BS1	QC	7/28/2017 12:45PM	DIW	25	25	7G06078		2500		
B G2470-DUP1	QC	7/28/2017 12:45PM	DIW	25	25		1720267-08			
B G2470-MS1	QC	7/28/2017 12:45PM	DIW	25	25	7G06078	1720267-08	2500		
B G2470-MSD1	QC	7/28/2017 12:45PM	DIW	25	25	7G06078	1720267-08	2500		

Spike Mixes	Description	Solvent	Prepared	Expires
7G06078	SULFIDE 5.0 WORK	H2O	7/6/2017 by Daniel Wenceslao	1/8/2018



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Raw Data - Sequence Information



ANALYSIS SEQUENCE

1713618

Instrument: SPEC06
Calibration ID: Sequence Date: 07/28/2017 Printed: 8/24/2017 10:33:44AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1713618-ICV1	QC		1		7G07020		
1713618-ICB1	QC		2				
B[G2469-BS1]	QC		3				
B[G2470-BS1]	QC		4				
B[G2469-BLK1]	QC		5				
B[G2470-BLK1]	QC		6				
1720121-13	iSM4500SDw Total Sulfide	I	7				
B[G2469-DUP1]	QC		8				
B[G2469-MS1]	QC		9				
B[G2469-MSD1]	QC		10				
1720121-11	iSM4500SDw Total Sulfide	I	11				
1720121-12	iSM4500SDw Total Sulfide	I	12				
1720121-14	iSM4500SDw Total Sulfide	H	13				
1720122-03	iSM4500SDw Total Sulfide	U	14				
1713618-CCV1	QC		15		7G07021		
1713618-CCB1	QC		16				
1720122-04	iSM4500SDw Total Sulfide	N	17				
1720122-05	iSM4500SDw Total Sulfide	K	18				
1720122-06	iSM4500SDw Total Sulfide	K	19				
1720267-01	iSM4500SDw Total Sulfide	G	20				
1720267-02	iSM4500SDw Total Sulfide	G	21				
1720267-08	iSM4500SDw Diss Sulfide	H	22			BatchQC	
1720267-08	iSM4500SDw Total Sulfide	H	22				
B[G2470-DUP1]	QC		23				
B[G2470-MS1]	QC		24				
B[G2470-MSD1]	QC		25				
1720267-03	iSM4500SDw Total Sulfide	G	26				
1713618-CCV2	QC		27		7G07021		
1713618-CCB2	QC		28				
1720267-04	iSM4500SDw Total Sulfide	I	29				
1720267-09	iSM4500SDw Total Sulfide	H	30				
1720267-10	iSM4500SDw Total Sulfide	H	31				
1720267-11	iSM4500SDw Total Sulfide	H	32				
1720309-01	iSM4500SDw Total Sulfide	E	33				
1720309-02	iSM4500SDw Total Sulfide	E	34				
1720179-02	iSM4500SDw Diss Sulfide	H	35				
1720315-01	iSM4500SDw Diss Sulfide	L	36				
1713618-CCV3	QC		37		7G07021		
1713618-CCB3	QC		38				



Laboratories, Inc.

Environmental Testing Laboratory Since 1949



Data Review Report

<u>Sequence and Sample #</u>	<u>Sample Name</u>	<u>Batch #</u>	<u>Analysed</u>
1713618			
1	1713618-ICV1	1713618	7/28/2017 12:45:00PM
2	1713618-ICB1	1713618	7/28/2017 12:45:00PM
3	B[G2469-BS1]	B[G2469]	7/28/2017 12:45:00PM
4	B[G2470-BS1]	B[G2470]	7/28/2017 12:45:00PM
5	B[G2469-BLK1]	B[G2469]	7/28/2017 12:45:00PM
6	B[G2470-BLK1]	B[G2470]	7/28/2017 12:45:00PM
7	1720121-13	B[G2469]	7/28/2017 12:45:00PM
8	B[G2469-DUP1]	B[G2469]	7/28/2017 12:45:00PM
9	B[G2469-MS1]	B[G2469]	7/28/2017 12:45:00PM
10	B[G2469-MSD1]	B[G2469]	7/28/2017 12:45:00PM
11	1720121-11	B[G2469]	7/28/2017 12:45:00PM
12	1720121-12	B[G2469]	7/28/2017 12:45:00PM
13	1720121-14	B[G2469]	7/28/2017 12:45:00PM
14	1720122-03	B[G2469]	7/28/2017 12:45:00PM
15	1713618-CCV1	1713618	7/28/2017 12:45:00PM
16	1713618-CCB1	1713618	7/28/2017 12:45:00PM
17	1720122-04	B[G2469]	7/28/2017 12:45:00PM
18	1720122-05	B[G2469]	7/28/2017 12:45:00PM
19	1720122-06	B[G2469]	7/28/2017 12:45:00PM
20	1720267-01	B[G2469]	7/28/2017 12:45:00PM
21	1720267-02	B[G2469]	7/28/2017 12:45:00PM
22	1720267-08	B[G2470]	7/28/2017 12:45:00PM
23	B[G2470-DUP1]	B[G2470]	7/28/2017 12:45:00PM
24	B[G2470-MS1]	B[G2470]	7/28/2017 12:45:00PM
25	B[G2470-MSD1]	B[G2470]	7/28/2017 12:45:00PM
26	1720267-03	B[G2470]	7/28/2017 12:45:00PM
27	1713618-CCV2	1713618	7/28/2017 12:45:00PM
28	1713618-CCB2	1713618	7/28/2017 12:45:00PM
29	1720267-04	B[G2470]	7/28/2017 12:45:00PM
30	1720267-09	B[G2470]	7/28/2017 12:45:00PM
31	1720267-10	B[G2470]	7/28/2017 12:45:00PM
32	1720267-11	B[G2470]	7/28/2017 12:45:00PM
33	1720309-01	B[G2470]	7/28/2017 12:45:00PM
34	1720309-02	B[G2470]	7/28/2017 12:45:00PM
35	1720179-02	B[G2470]	7/28/2017 12:45:00PM
36	1720315-01	B[G2470]	7/28/2017 12:45:00PM
37	1713618-CCV3	1713618	7/28/2017 12:45:00PM
38	1713618-CCB3	1713618	7/28/2017 12:45:00PM

/2/17	9:13	<u>Sequence #:</u>	1713618	<u>Result</u>	<u>Qualifier</u>	<u>Units</u>	<u>Dil</u>	<u>MDL</u>	<u>MRL</u>	<u>Rpt</u>	<u>Recovery & RPD</u>
Sequence # 1713618											
Sample ID:	1713618-ICV1	Sequence Sample # 1									
SM4500SDw Diss Sulfide		0.48814			mg/L	1.00			Y		97.6
SM4500SDw Total Sulfide		0.48814			mg/L	1.00			Y		97.6
Sample ID:	1713618-JCB1	Sequence Sample # 2									
SM4500SDw Diss Sulfide		0.0000			mg/L	1.00			Y		
SM4500SDw Total Sulfide		0.0000			mg/L	1.00			Y		
Sample ID:	B[G2469-BS1]	Sequence Sample # 3			Batch #	B[G2469]					
SM4500SDw Total Sulfide		0.49938			mg/L	1.00	0.050	0.10	Y		99.9
Sample ID:	B[G2470-BS1]	Sequence Sample # 4			Batch #	B[G2470]					
SM4500SDw Diss Sulfide		0.49938			mg/L	1.00	0.050	0.10	Y		99.9
SM4500SDw Total Sulfide		0.49938			mg/L	1.00	0.050	0.10	Y		99.9

3/2/17	9:13	<u>Sequence #:</u>	1713618	<u>Result</u>	<u>Qualifier</u>	<u>Units</u>	<u>Dil</u>	<u>MDL</u>	<u>MRL</u>	<u>Rpt</u>	<u>Recovery & RPD</u>
Sample ID:	B G2469-BLK1	Sequence Sample #	5			Batch #	B[G2469]				
SM4500SDw Total Sulfide		0.0000				mg/L	1.00	0.050	0.10	Y	
Sample ID:	B G2470-BLK1	Sequence Sample #	6			Batch #	B[G2470]				
SM4500SDw Diss Sulfide		0.0000				mg/L	1.00	0.050	0.10	Y	
SM4500SDw Total Sulfide		0.0000				mg/L	1.00	0.050	0.10	Y	
Sample ID:	1720121-13	Sequence Sample #	7			Batch #	B[G2469]				
SM4500SDw Total Sulfide		0.011				mg/L	1.00	0.050	0.10	Y	
Sample ID:	B G2469-DUP1	Sequence Sample #	8			Batch #	B[G2469]				
SM4500SDw Total Sulfide		0.0090900				mg/L	1.00	0.050	0.10	Y	
Sample ID:	B G2469-MS1	Sequence Sample #	9			Batch #	B[G2469]				
SM4500SDw Total Sulfide		0.46567				mg/L	1.00	0.050	0.10	Y	93.1
Sample ID:	B G2469-MSD1	Sequence Sample #	10			Batch #	B[G2469]				
SM4500SDw Total Sulfide		0.45925				mg/L	1.00	0.050	0.10	Y	91.8
Sample ID:	1720121-11	Sequence Sample #	11			Batch #	B[G2469]				
SM4500SDw Total Sulfide		0.0030				mg/L	1.00	0.050	0.10	Y	
Sample ID:	1720121-12	Sequence Sample #	12			Batch #	B[G2469]				
SM4500SDw Total Sulfide		0.0030	A07			mg/L	2.00	0.10	0.20	Y	
Sample ID:	1720121-14	Sequence Sample #	13			Batch #	B[G2469]				
SM4500SDw Total Sulfide		0.0015				mg/L	1.00	0.050	0.10	Y	
Sample ID:	1720122-03	Sequence Sample #	14			Batch #	B[G2469]				
SM4500SDw Total Sulfide		0.73	A07			mg/L	20.00	1.0	2.0	Y	
Sample ID:	1713618-CCV1	Sequence Sample #	15								
SM4500SDw Diss Sulfide		0.49938				mg/L	1.00			Y	99.9
SM4500SDw Total Sulfide		0.49938				mg/L	1.00			Y	99.9
Sample ID:	1713618-CCB1	Sequence Sample #	16								
SM4500SDw Diss Sulfide		0.0000				mg/L	1.00			Y	
SM4500SDw Total Sulfide		0.0000				mg/L	1.00			Y	
Sample ID:	1720122-04	Sequence Sample #	17			Batch #	B[G2469]				
SM4500SDw Total Sulfide		0.0030				mg/L	1.00	0.050	0.10	Y	
Sample ID:	1720122-05	Sequence Sample #	18			Batch #	B[G2469]				
SM4500SDw Total Sulfide		0.030	A07			mg/L	2.00	0.10	0.20	Y	
Sample ID:	1720122-06	Sequence Sample #	19			Batch #	B[G2469]				
SM4500SDw Total Sulfide		0.0				mg/L	1.00	0.050	0.10	Y	
Sample ID:	1720267-01	Sequence Sample #	20			Batch #	B[G2469]				
SM4500SDw Total Sulfide		0.0	A07			mg/L	2.00	0.10	0.20	Y	
Sample ID:	1720267-02	Sequence Sample #	21			Batch #	B[G2469]				
SM4500SDw Total Sulfide		0.0030				mg/L	1.00	0.050	0.10	Y	
Sample ID:	1720267-08	Sequence Sample #	22			Batch #	B[G2470]				
SM4500SDw Diss Sulfide		0.0061				mg/L	1.00	0.050	0.10	Y	
SM4500SDw Total Sulfide		0.0061				mg/L	1.00	0.050	0.10	Y	
Sample ID:	B G2470-DUP1	Sequence Sample #	23			Batch #	B[G2470]				
SM4500SDw Diss Sulfide		0.0060600				mg/L	1.00	0.050	0.10	Y	
SM4500SDw Total Sulfide		0.0060600				mg/L	1.00	0.050	0.10	Y	
Sample ID:	B G2470-MS1	Sequence Sample #	24			Batch #	B[G2470]				
SM4500SDw Diss Sulfide		0.42071				mg/L	1.00	0.050	0.10	Y	84.1
SM4500SDw Total Sulfide		0.42071				mg/L	1.00	0.050	0.10	Y	84.1
Sample ID:	B G2470-MSD1	Sequence Sample #	25			Batch #	B[G2470]				
SM4500SDw Diss Sulfide		0.42393				mg/L	1.00	0.050	0.10	Y	84.8
SM4500SDw Total Sulfide		0.42393				mg/L	1.00	0.050	0.10	Y	84.8
Sample ID:	1720267-03	Sequence Sample #	26			Batch #	B[G2470]				
SM4500SDw Total Sulfide		0.0				mg/L	1.00	0.050	0.10	Y	
Sample ID:	1713618-CCV2	Sequence Sample #	27			Batch #	B[G2470]				
SM4500SDw Diss Sulfide		0.49938				mg/L	1.00			Y	99.9
SM4500SDw Total Sulfide		0.49938				mg/L	1.00			Y	99.9
Sample ID:	1713618-CCB2	Sequence Sample #	28			Batch #	B[G2470]				
SM4500SDw Diss Sulfide		0.0000				mg/L	1.00			Y	

8/2/17	9:13	<u>Sequence #:</u>	1713618	<u>Result</u>	<u>Qualifier</u>	<u>Units</u>	<u>Dil</u>	<u>MDL</u>	<u>MRL</u>	<u>Rpt</u>	<u>Recovery & RPD</u>
Sample ID:	1713618-CCB2	Sequence Sample #	28	0.0000		mg/L	1.00			Y	
iSM4500SDw Total Sulfide											
Sample ID:	1720267-04	Sequence Sample #	29		Batch #	B[G2470					
iSM4500SDw Total Sulfide				0.021		mg/L	1.00	0.050	0.10	Y	
Sample ID:	1720267-09	Sequence Sample #	30		Batch #	B[G2470					
iSM4500SDw Total Sulfide				0.0030		mg/L	1.00	0.050	0.10	Y	
Sample ID:	1720267-10	Sequence Sample #	31		Batch #	B[G2470					
iSM4500SDw Total Sulfide				0.0030		mg/L	1.00	0.050	0.10	Y	
Sample ID:	1720267-11	Sequence Sample #	32		Batch #	B[G2470					
iSM4500SDw Total Sulfide				0.0091		mg/L	1.00	0.050	0.10	Y	
Sample ID:	1720309-01	Sequence Sample #	33		Batch #	B[G2470					
iSM4500SDw Total Sulfide				0.021		mg/L	1.00	0.050	0.10	Y	
Sample ID:	1720309-02	Sequence Sample #	34		Batch #	B[G2470					
SM4500SDw Total Sulfide				0.0046		mg/L	1.00	0.050	0.10	Y	
Sample ID:	1720179-02	Sequence Sample #	35		Batch #	B[G2470					
iSM4500SDw Diss Sulfide				0.018		mg/L	1.00	0.050	0.10	Y	
Sample ID:	1720315-01	Sequence Sample #	36		Batch #	B[G2470					
SM4500SDw Diss Sulfide				0.0015		mg/L	1.00	0.050	0.10	Y	
Sample ID:	1713618-CCV3	Sequence Sample #	37								
SM4500SDw Diss Sulfide				0.49938		mg/L	1.00			Y	99.9
SM4500SDw Total Sulfide				0.49938		mg/L	1.00			Y	99.9
Sample ID:	1713618-CCB3	Sequence Sample #	38								
SM4500SDw Diss Sulfide				0.0000		mg/L	1.00			Y	
SM4500SDw Total Sulfide				0.0000		mg/L	1.00			Y	

Recovery and RPD Out of Control Report

<u>Sample ID</u>	<u>Analyte</u>	<u>Rpt</u>	<u>Qual.</u>	<u>% Rec</u>	<u>RPD</u>	<u>Limits</u>
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Hold Time Out of Control Report

<u>Analyte</u>	<u>Sample ID</u>	<u>Sample Date</u>	<u>Prep Date</u>	<u>Prep Expires</u>	<u>Date Analyzed</u>	<u>Analysis Exp.</u>	<u>SO5 FI</u>
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Method ID: I376.2 Sulfide
Instrument: SPEC06
Run Date: 07/28/2017
Run Number: 1
Full XLS File Name: W:\EDS\bcElm\ChartReader\Sulfide\SULFIDE 07-28-17 #01.xls

Mult Factor: 1
IR Blank Subtraction: 0

Digits Past Decimal (IR): 5
Use PTP Below Std1: Y
Use PTP Below Std2: N

Standards

Conc	Reading
0	0.000
0.05	0.033
0.1	0.064
0.2	0.125
0.5	0.312
1.0	0.624

Correlation Coefficient: 0.999995138764031

Lab Number	Chart Reading	Instrument Reading	Dilution	Run Date	Run Time	Instrument	Analyst
1713618- CV1	0.305	0.48814	1	07/28/2017	12:45	SPEC06	DIW
1713618- CB1	0.000	0.00000	1	07/28/2017	12:45	SPEC06	DIW
BG2469-B S1	0.312	0.49938	1	07/28/2017	12:45	SPEC06	DIW
BG2470-B S1	0.312	0.49938	1	07/28/2017	12:45	SPEC06	DIW
BG2469-BLK1	0.000	0.00000	1	07/28/2017	12:45	SPEC06	DIW
BG2470-BLK1	0.000	0.00000	1	07/28/2017	12:45	SPEC06	DIW
1720121-13	0.007	0.01061	1	07/28/2017	12:45	SPEC06	DIW
BG2469-DUP1	0.006	0.00909	1	07/28/2017	12:45	SPEC06	DIW
BG2469-MS1	0.291	0.46567	1	07/28/2017	12:45	SPEC06	DIW
BG2469-MSD1	0.287	0.45925	1	07/28/2017	12:45	SPEC06	DIW
1720121-11	0.002	0.00303	1	07/28/2017	12:45	SPEC06	DIW
1720121-12	0.001	0.00152	2	07/28/2017	12:45	SPEC06	DIW
1720121-14	0.001	0.00152	1	07/28/2017	12:45	SPEC06	DIW
1720122-03	0.024	0.03636	20	07/28/2017	12:45	SPEC06	DIW
1713618-CCV1	0.312	0.49938	1	07/28/2017	12:45	SPEC06	DIW
1713618-CB1	0.000	0.00000	1	07/28/2017	12:45	SPEC06	DIW
1720122-04	0.002	0.00303	1	07/28/2017	12:45	SPEC06	DIW

Method ID: I376.2 Sulfide
Instrument: SPEC06
Run Date: 07/28/2017
Run Number: 1
Full XLS File Name: W:\EDS\bclm\ChartReader\Sulfide\SULFIDE 07-28-17 #01.xls

Mult Factor: 1
IR Blank Subtraction: 0
Digits Past Decimal (IR): 5
Use PTP Below Std1: Y
Use PTP Below Std2: N

Lab Number	Chart Reading	Instrument	Dilution	Run Date	Run Time	Instrument	Analyst
1720122-05	0.010	0.01515	2	07/28/2017	12:45	SPEC06	DIW
1720122-06	0.000	0.00000	1	07/28/2017	12:45	SPEC06	DIW
1720267-01	0.000	0.00000	2	07/28/2017	12:45	SPEC06	DIW
1720267-02	0.002	0.00303	1	07/28/2017	12:45	SPEC06	DIW
1720267-08	0.004	0.00606	1	07/28/2017	12:45	SPEC06	DIW
BIG2470-DUP1	0.004	0.00606	1	07/28/2017	12:45	SPEC06	DIW
BIG2470-MS1	0.263	0.42071	1	07/28/2017	12:45	SPEC06	DIW
BIG2470-MSD1	0.265	0.42393	1	07/28/2017	12:45	SPEC06	DIW
1720267-03	0.000	0.00000	1	07/28/2017	12:45	SPEC06	DIW
1713618-CCV2	0.312	0.49938	1	07/28/2017	12:45	SPEC06	DIW
1713618-CCB2	0.000	0.00000	1	07/28/2017	12:45	SPEC06	DIW
1720267-04	0.014	0.02121	1	07/28/2017	12:45	SPEC06	DIW
1720267-09	0.002	0.00303	1	07/28/2017	12:45	SPEC06	DIW
1720267-10	0.002	0.00303	1	07/28/2017	12:45	SPEC06	DIW
1720267-11	0.006	0.00909	1	07/28/2017	12:45	SPEC06	DIW
1720309-01	0.014	0.02121	1	07/28/2017	12:45	SPEC06	DIW
1720309-02	0.003	0.00455	1	07/28/2017	12:45	SPEC06	DIW
1720179-02	0.012	0.01818	1	07/28/2017	12:45	SPEC06	DIW
1720315-01	0.001	0.00152	1	07/28/2017	12:45	SPEC06	DIW
1713618-CCV3	0.312	0.49938	1	07/28/2017	12:45	SPEC06	DIW
1713618-CCB3	0.000	0.00000	1	07/28/2017	12:45	SPEC06	DIW

WET CHEMISTRY RUNLOG

BC LABORATORIES, INC.			
Reviewed by:		Date :	
Run ID # ①	<input type="checkbox"/> W-Hz-Sulfide-376.1 _____ <input type="checkbox"/> W-Hz-Sulfide-376.2 Sulfide _____		
Analyte:	Sulfide	ml Spike:	2.5 mls
Method:	376.2	Conc Spike:	5 mg/L
Analyst:	DIW	ml Sample:	22.5 mls
Date:	07/28/17	Spike ID #:	S- 070617 5-
Time:	12:45	BS1 ID #:	S- 5-
Corr Coef:	0.99999	ICV #:	S- 5-

CONC	RESPONSE	IDENTIFICATION #	
0.05	0.083	S-	072817 0.05
0.1	0.064	S-	0.1
0.2	0.125	S-	0.2
0.5	0.312	S-	0.5
1.0	0.624	S-	1.0

Comments: _____

	Lab ID #	Dil	Abs/tit	Result	P/R		Lab ID #	Dil	Abs/tit	Result	P/R
1	ICV		0.305			21	Dup		0.004		
2	ICB		0.000			22	MS		0.263		
3	BS1		0.312			23	MSD		0.265		
4	BLK1		0.000			24	20267-3 G		0.089 / 0.000		✓
5	20121-13 I		0.007		✓	25	CCW2		0.312		
6	Dup.		0.006			26	CCB2		0.000		
7	MS		0.291			27	20267-4 I		0.014		✓
8	MSD		0.287			28	- 9 H		0.002		✓
9	20121-11 I	(T)	0.031 / 0.002		✓	29	- 10 H		0.002		✓
10	- 12 I	(T) X2	0.028 / 0.001		✓	30	↓ - 11 H	(T)	0.039 / 0.006		✓
11	↓ - 14 H		0.001		✓	31	20309-1 E		0.014		✓
12	20122-3 N	(T) X20	0.148 / 0.024		✓	32	↓ - 2 E		0.003		✓
13	CCW1		0.312			33	D 20179-2 H		0.012		✓
14	CCB1		0.000			34	D 20315-1 L	(T)	0.036 / 0.001		✓
15	20122-4 N		0.027 / 0.002		✓	35	CCW3		0.312		
16	- 5 K	(T) X2	0.064 / 0.010		✓	36	CCB3		0.000		
17	↓ - 6 K		0.000		✓	37	Blank Subtract				
18	20267-1 G	X2	0.045 / 0.000		✓	38	20121-11		0.029		
19	↓ - 2 G		0.002		✓	39	↓ - 12	X2	0.027		
20	20267-8 H		0.004		✓	40	20122-3	X20	0.124		

Batch # B1G2469

Batch # B1G2470

Sequence # 1713618

$$\begin{aligned} 20122-4 &= 0.025 \\ \downarrow - 5 X2 &= 0.054 \\ 20267-1 X2 &= 0.046 \end{aligned}$$

$$\begin{aligned} 20267-3 &= 0.089 \\ \downarrow - 11 &= 0.033 \\ 20315-1 &= 0.035 \end{aligned}$$



AMEC Environmental & Infrastructure-
9210 Sky Park Court #200
San Diego, CA 92123

Reported: 8/24/2017 10:33:44AM

Project: Alameda

Project Number: 5023146096

Project Manager: Kevin Olness

Notes and Definitions

B	Blank contamination. The analyte is greater than 1/2 the PQL/LOQ/CRQL in the associated method blank.
D	The reported value is from a dilution.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration.
J	The reported value is an estimated value. Results are between the MDL and PQL/LOQ/CRQL.
U	The analyte was not detected and is reported as less than the LOD/MDL or as defined by the client.